JVC

SERVICE MANUAL

MODEL

RC-550L/LB

FM-LW-MW-SW1-SW2
5-BAND RADIO
CASSETTE
RECORDER

No. 1384
December 1978

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Specifications

DIMENSIONS: 35.6cm(H) x 49.8cm(W) x 15.6cm(D)
14" x 19-5/8" x 6-1/8"

WEIGHT: Approx. 7.8kg (with batteries)
17.2 lbs.

TUNER SECTION

Frequency Ranges	:	FM 88~108MHz
		LW 150~350kHz
		MW 540~1600kHz
		SW1 5.95~6.2MHz
		SW2 6~18MHz
Antennas	:	FM/SW Rod Antenna
		MW/LW Ferrite Core Antenna

RECORDER SECTION

Tape Speed	:	4.8cm/s (1-7/8 ips)
Track System	:	2-track monaural
Recording System	:	AC Bias
Erasing System	:	AC Erasing
S/N Ratio	:	More than 52dB at 1kHz
Fast Forward Time	:	Within 100 sec. (C-60 cassette)
Rewinding Time	:	Within 100 sec. (C-60 cassette)
Wow & Flutter	:	0.17% (WRMS)

AMPLIFIER SECTION

Speakers	:	Woofer 25cm (10") x 1
		Mid-range 10cm (4") x 1
		Tweeter 5cm (2") x 1
Power Output	:	Max. 14 watts
		10 watts at 10% T.H.D.
Input Jacks	:	MIC (0.8mV, low imp.)
Output Jacks	:	Earphone
Input/Output Jack	:	DIN
POWER CONSUMPTION	:	25W
SEMICONDUCTORS		
ICs	:	6 (includes condenser microphone)
Transistors	:	22
Diodes	:	21
POWER SOURCE		
DC	:	12V, 8 "R20" or "U2" cells, or equivalent
AC	:	110/220/240V, 50/60Hz (L) 240V, 50/60Hz (LB)

Technical Information

Hall IC (Integrated Circuit)

This recorder is adopted with the full automatic stop mechanism. When the tape is finished in any mode: record, playback, fast forward or rewind, the tape transporting mechanism stops and the corresponding control buttons return to their normal positions and the power is shut off. The tape stop is detected by the Hall IC which is located in the magnetic field of ring magnet: the magnet is connected to the shaft of the tape counter and it is rotating while the tape is running.

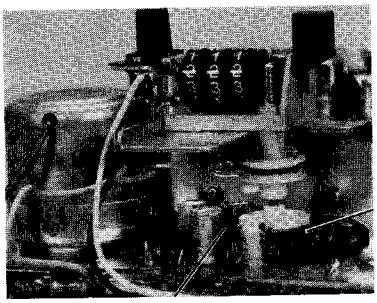


Fig. 1

HALL ELEMENT

The Hall IC consists of the Hall element and amplifier as shown in Fig. 2.
The Hall element is one of magneto-electronic converter and possesses the Hall effect.

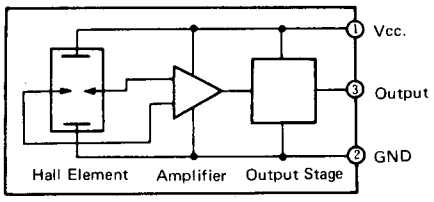


Fig. 2

The output voltage of IC is proportional to the magnetic field strength.

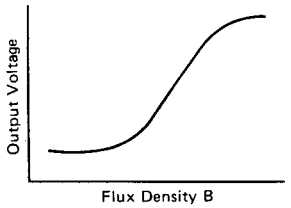


Fig. 3

The Hall IC acts as an electronic switch which makes or brakes a circuit according to the magnetic strength.
As the electronic switch does not have any contact, it provides the longer serviceable life and the higher reliability than mechanical switches e.g. reed switches.

HALL EFFECT

When a conductor or semi-conductor carrying a current is placed in a magnetic field as shown in Fig. 4, the output voltage is expressed by

$$V_H = R_H [Ic \times B/t]$$

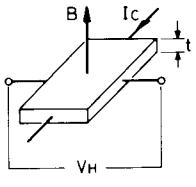


Fig. 4

where R_H is a parameter called the Hall coefficient,
Ic is the control current,
B is the magnetic field strength,
t is the thickness of the element.

CIRCUITRY OF TAPE STOP DETECTOR

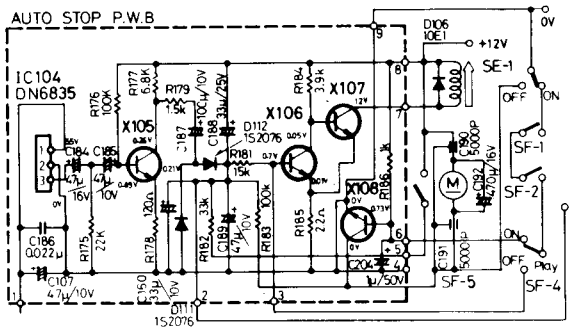


Fig. 5

1. While the tape is running

1) The voltage wave mode as shown in Fig. 6 appears on the output terminal of the Hall IC.

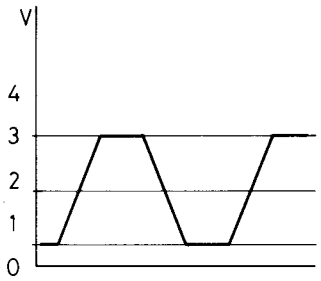


Fig. 6

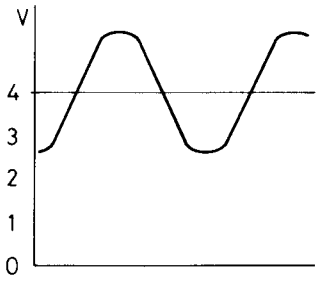


Fig. 7

2) The wave (Fig. 6) is amplified by the transistor X105 and the bias voltage as shown in Fig. 7 is applied to the X106.
The X106 becomes ON state, and the voltage across the collector and emitter of X106 decreases to cut off the X107.
3) The collector current of X107 does not flow so that the solenoid does not function.

2. When the tape stops

1) The output of the IC maintains constant voltage (DC) according to the magnetic field strength.
2) The DC voltage is choked by the capacitor C184.
3) The bias voltage does not change so that the X106 maintains the OFF state.
4) The voltage across the collector and emitter of X106 drives the X107 to become the ON state. and the collector current flows.
The solenoid functions to stop the mechanism.

3. When the PAUSE switch is pressed

When the PAUSE switch is turned on, the bias voltage is applied to the X106 and the X106 becomes the ON state. The following responses are the same as "While the tape is running".

Main Parts Location

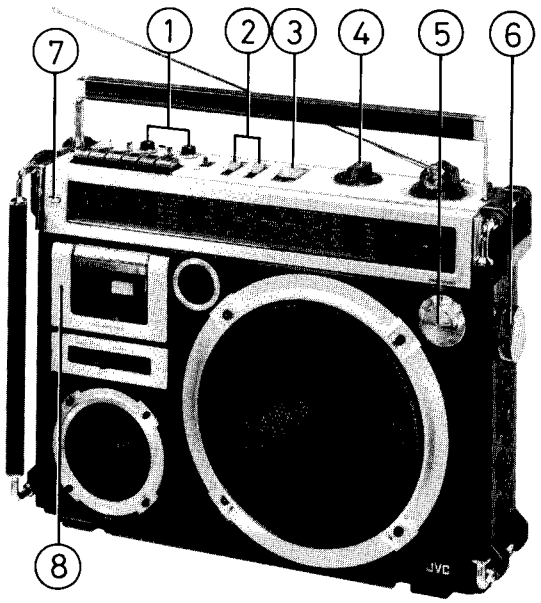


Fig. 8

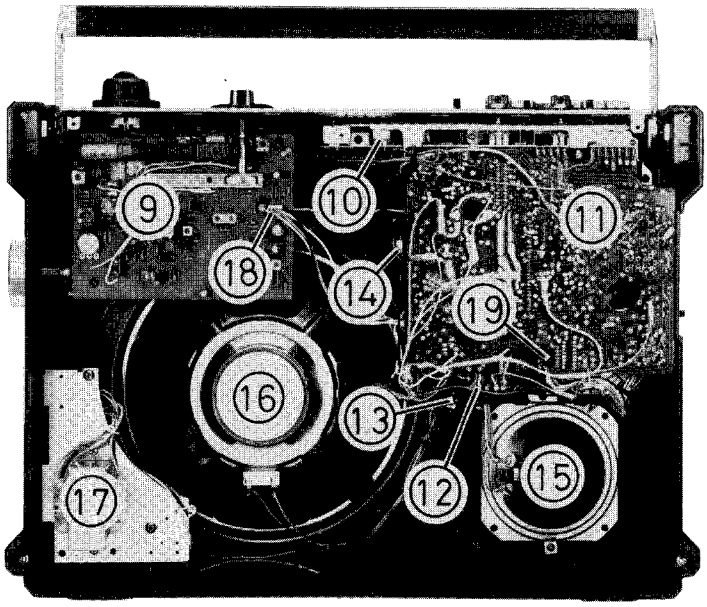


Fig. 9

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VXL4029-00A	Knob	REC LEVEL, MIX BALANCE	2
2	*VXS4010-001	"	BASS, TREBLE	2
3	*VXS4011-001	"	VOLUME	1
4	*VXL4030-001	"	BAND SELECTOR	1
5	*VXL4028-00B	"	FINE TUNING	1
6	*VXKM050-30010	"	Tuning	1
7	*VXP4017-001	"	DIAL LIGHT	1
8	*ZCRC550-CCA	Cassette Case Ass'y	Rubber Ring: *VYH4275-002	1
9	* ————	Circuit Board Ass'y	Tuner	1
10	* ————	"	Control	1
11	* ————	"	Amplifier	1
12	* ————	"	Auto Stop	1
13	* ————	"	Divider	1
14	EAS5PH50SK	Speaker	SPK-3(Tweeter) 5cm (2")	1
15	*EAS10PM115S	"	SPK-2(Mid-Range) 10cm (4")	1
16	*EAS25P77S	"	SPK-1(Woofer) 25cm (10")	1
17	*VTP57N2-12A	Power Transformer	⚠T101	1
18	*VDM5044-001-001	Connector & Wire Ass'y	4-pin	1
19	*VDM5044-001-002	"	6-pin	1

Note:
1. **Asterisked parts (*) show "NEW PARTS". Other parts are all "CURRENT PARTS"; therefore, check your inventory and order situation before placing new order to avoid making extra stock.**
2. **The circuit board assemblies and whole assembly of cassette mechanism in this model will not be available as spare parts.**
3. **The parts marked ⚠ are the important parts for safety assurance. Use the specified part, when replacing the safety assurance part, never use an equivalent one.**

Disassembly & Replacement

Rear Cabinet

1. Remove 7 screws (1)~(3): SDSP3020RS and (4)~(7): SDSB4030R.
2. Disconnect 3 connectors: white wire from rod antenna to the tuner circuit board, red wire from power supply section to the battery terminal, and black wire from shield to the amplifier circuit board.

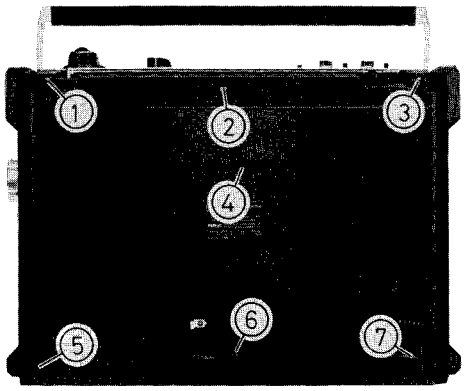


Fig. 10

Tuner Circuit Board

1. Set the tuning dial to the minimum frequency.
2. Take off the band selector and fine tuning knobs.
3. Disconnect the connector (A) from the amplifier section.
4. Remove 4 screws (8)~(11): SBSB3012C.

Note: Fit the arm of variable capacitor and two projections of dial drum when mounting the circuit board on the cabinet. For details refer to page 13.

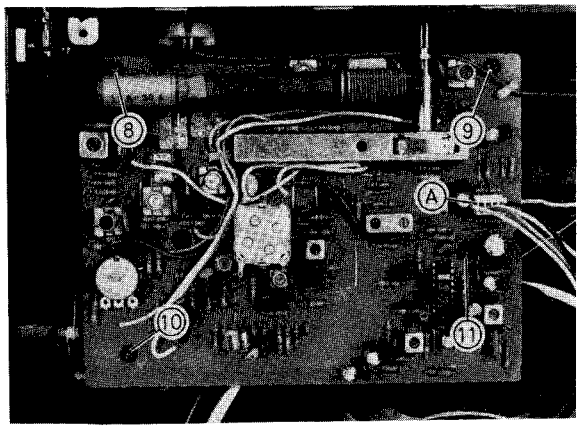


Fig. 11

Cassette Mechanism & Amplifier Circuit Board Assembly

1. Take off the REC LEVEL, MIX BALANCE, bass, treble and volume control knobs.
2. Disconnect the 6-pin connector (B) and 6 single connectors (C)~(H).
   (C): Red wire from power supply section
   (D): Black wire from power supply section
   (E): Black wire from common line of level meter and dial light
   (F): Orange wire from divider circuit board
   (G): White wire from level meter
   (H): Brown wire from mid-range speaker
3. Release the blue wire from condenser microphone by straightening the wire holder (I).
4. Remove 6 screws (12)~(17): SBSB3012C.

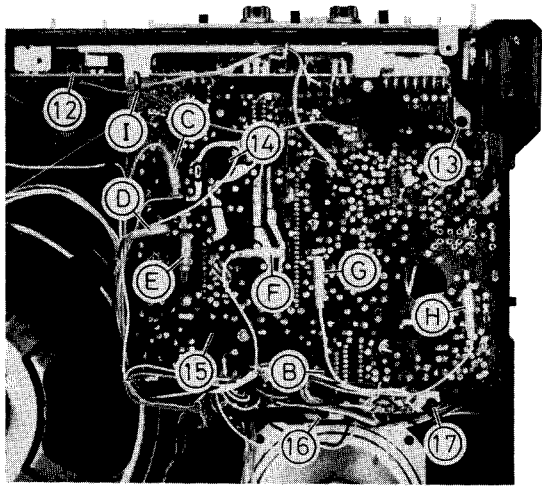


Fig. 12

Amplifier & Control Circuit Boards Assembly

1. Remove 6 screws (18)~(22): SPSP2606Z and (35): DPSP3006ZS, when the cassette mechanism and amplifier circuit board assembly has been taken out of the cabinet.
2. Remove 6 screws (12): SBSB3010C and (18)~(22): SPSP2606Z, when the cassette mechanism and amplifier circuit board assembly has been mounted on the cabinet.
3. Engage the projection of function switch lever and the slider of function switch in place, when mounting the circuit board on the mechanism.

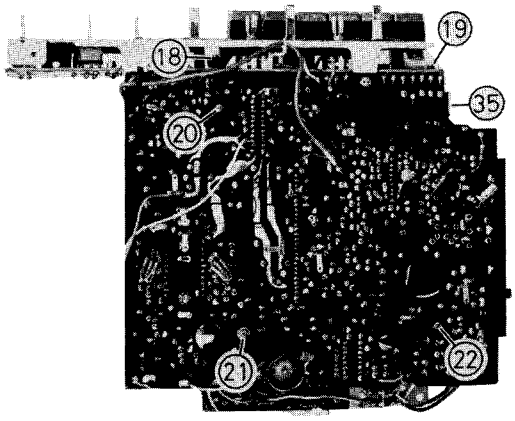


Fig. 13

Chassis

1. Take off the tuning knob.
2. Take out the tuner circuit board and cassette mechanism.
3. Remove the hook lever (J) by loosening the screw (23): SBSB3008Z.
4. Remove 6 screws (24)~(29): SBSB3016Z.

Note: Be careful not to lose the dial light knob which is inserted into the slot of cabinet.

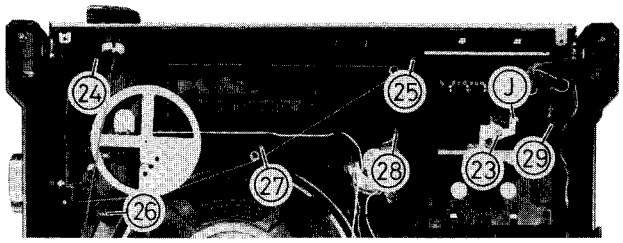


Fig. 14

LED Circuit Board

Press 2 projections of chassis to the arrow direction as shown in Fig. 15.

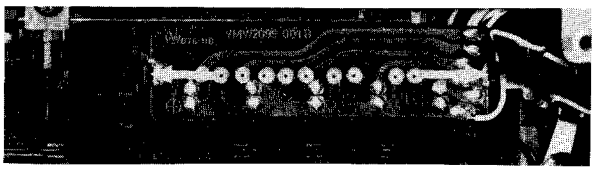


Fig. 15

Auto Stop Circuit Board

Remove 2 screws (30) & (31): SPSP2606Z.

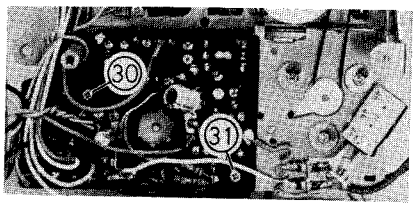


Fig. 16

Divider Circuit Board

Remove the screw (32): SBSB3008Z.

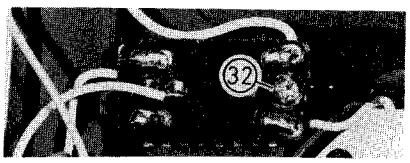


Fig. 17

Power Supply Section

Remove 2 screws (33) & (34): SBSB4012C.

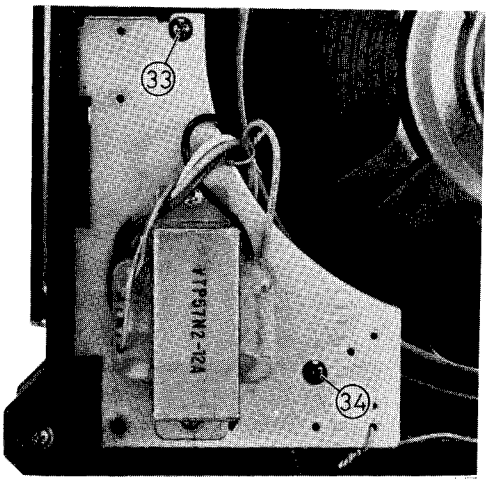


Fig. 18

Parts of Cassette Mechanism

Note: Reference numbers on the figures from 19 to 22 are the same as on Fig. 51.

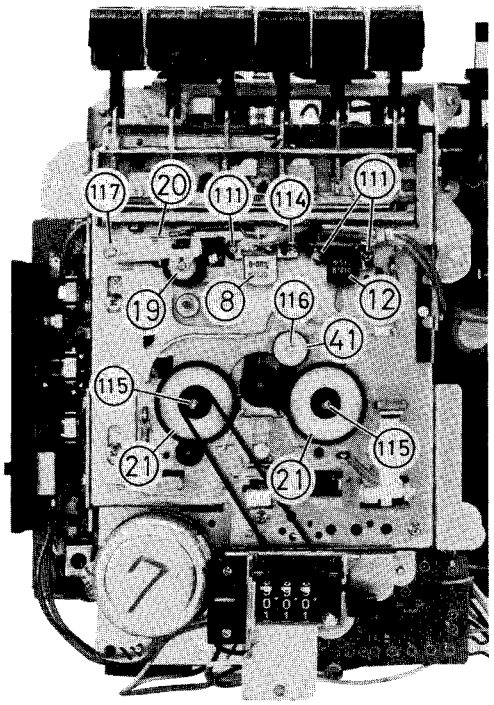


Fig. 19

A. Pinch Roller Ass'y (19)
Remove the E-ring (117).
Note: Be careful not to lose the spring (20).

B. Play/Record Head (8)
Remove 2 screws (111) & (114).
Note: When replacing the head, it is permitted to solder the signal wires directly to the terminals though the small printed circuit board is soldered to the terminals.

C. Erase Head (12)
Remove 2 screws (111).

D. Reel Disk Ass'y (21)
Remove the E-ring (115).
Note: Be careful not to lose the back tension spring (22) under the disk, when removing the supply reel disk.

E. Rewind Idler (41)
Remove the E-ring (116).

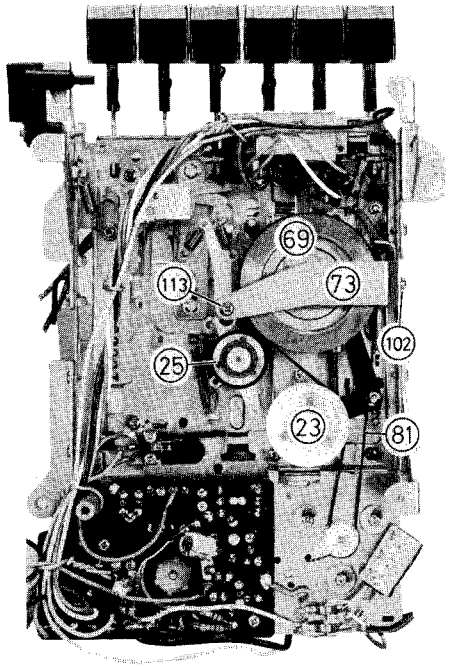


Fig. 20

F. Main Belt (81)
Remove the flywheel bracket (73) by loosening 2 screws (102) & (113).

G. Flywheel Ass'y (69)
Remove the flywheel bracket (73) by removing 2 screws (102) & (113).
Note: Be careful not to lose the special washer (72) which is inserted into the capstan shaft, when pulling up the flywheel.

H. FF Idler Ass'y (25)
1. Remove the flywheel bracket (73) by removing 2 screws (102) & (113).

Note: Be careful not to lose the spring (74), when removing the bracket.

2. Remove the E-ring (120).
3. Detouch 3 springs (26) & (48).

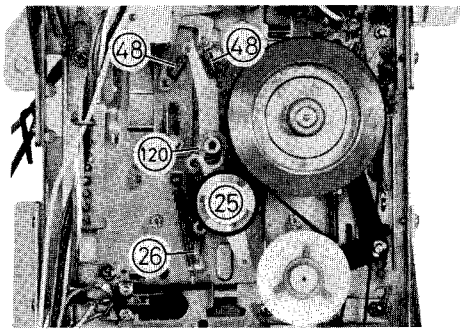


Fig. 21

I. Clutch Ass'y (23)
1. Remove the flywheel assembly.
2. Detouch the spring (24).
3. Remove the E-ring (117).

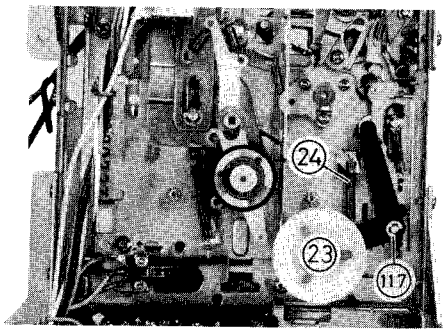


Fig. 22

Adjustment of Cassette Mechanism

Auto Stop Mechanism

If the auto stop mechanism is defective, check as follows.

1. When the solenoid does not suck the plunger:
   a. The coil of the solenoid may be opencircuited. The resistance value of solenoid should be approximately 50Ω.
   b. The diode (D113) may be open- or shortcircuited.
   c. The transistors (X105~107) may be defective.
   d. The connecting wires may be opencircuited.
   e. If the solenoid is lack of suction ability, bend the part A of adjusting arm to the B direction as shown in Fig. 23.
2. When the auto stop mechanism does not function, though the solenoid has sucked the plunger.
   a. The motor may be lack of torque. If it is, change it.
   b. The capstan belt may be lack of tension. If it is, change it.
   c. FF and rewind torque may be extremely high. If it is, adjust as following the "Adjustment of FF & Rewind Torque".
   d. The auto lever may be deformed. If it is, change it.

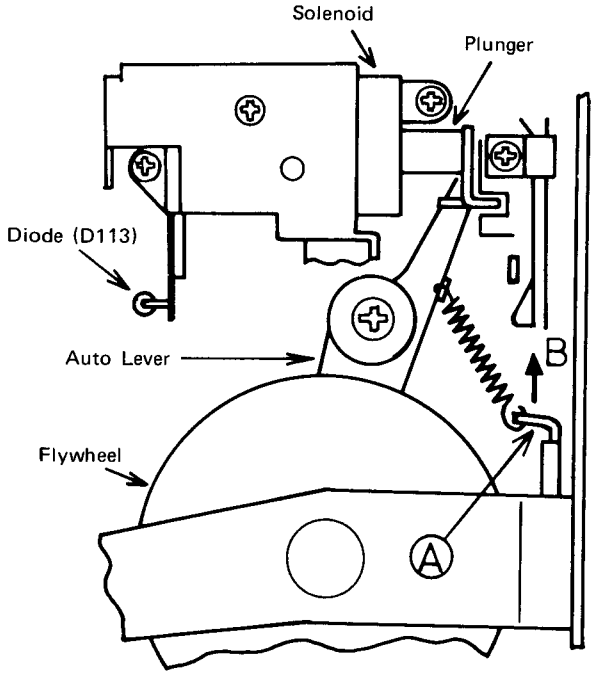


Fig. 23

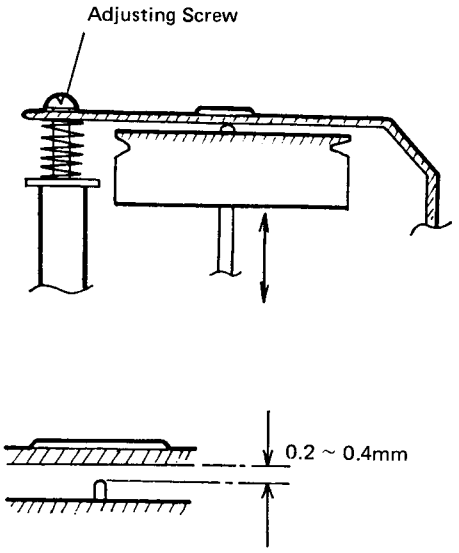


Fig. 24

Pause Mechanism

1. In the playback mode, check to see that the pinch roller separates from the capstan shaft and stops turning and then the reel disk stops turning and the tape stops when the PAUSE button has been pressed. Check to see that the tape restarts and is normally transported when the PAUSE button is released.
2. If the timing of pause mechanism is out of order: the takeup reel disk stops first and then the pinch roller stops, so that the tape is projected from the cassette half.
   Adjust the timing by bending the part (C) of pinch arm lever to the A direction.
3. The space between the pinch roller and the capstan shaft should be more than 0.5mm. If it is less than 0.5mm bend the part (C) to the A direction, and if it is excess bend the part (C) to B direction.

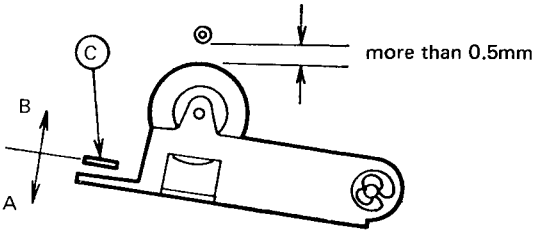


Fig. 25

Thrust of Flywheel

The clearance between the top of flywheel shaft and the flywheel bracket should be within 0.2 to 0.4mm. If the clearance is beyond the limits, adjust the screw for normal value.

Note: After adjustment, fix the screw with lock adhesive.

Cue & Review Mechanism

1. Timing of Cue Action

a. In the playback mode, if the CUE button is gradually pressed, the pinch roller stops turning first and then the takeup reel disk stops. If the CUE button is released, the takeup reek disk turns first and then the pinch roller rotates.

b. If the timing is out of order, adjust it as follows.
   1) If the tape is projected from the cassette half at the beginning of cue action, adjust it by bending the part (C) of pinch arm lever to the A direction as shown in Fig. 25.
   2) If the tape is fast forwarded at the beginning of cue action, bend the part (C) to the B direction as shown in Fig. 25.

2. Timing of Review Action

a. In the playback mode, if the REVIEW button is gradually pressed, the pinch roller stops turning first and then the takeup reel disk stops. If the REVIEW button is released, the takeup reel disk turns first and then the pinch roller rotates.

b. If the timing is out of order, adjust it as follows.
   1) If the tape is projected from the cassette half at the beginning of review action, bend the part (C) to the A direction as shown in Fig. 25.
   2) If the tape is fast forwarded at the beginning of review action, bend the part (C) to the B direction as shown in Fig. 25.

Notes: 1. After adjustment, if the pinch arm lever has been bended, check the pause timing and check that the gap between the pinch roller arm and pinch arm lever is more than 0.2mm when the REVIEW button is pressed in the recording mode.

2. After adjustment check that the gap between the RQ boss and the pinch roller arm plate is within 0.7 to 1mm. If it is beyond the limits, adjust it by bending the part (A) of pinch roller arm plate as shown in Fig. 27.

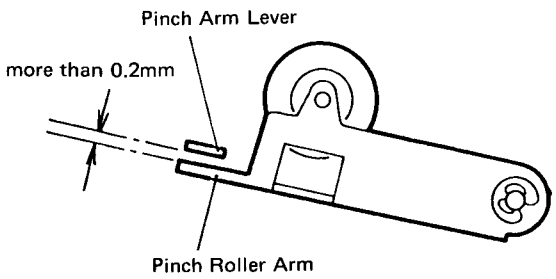


Fig. 26

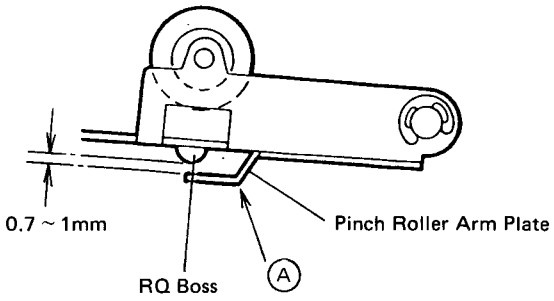


Fig. 27

Location of Heads

The record/play and erasing heads should be positioned as shown below.

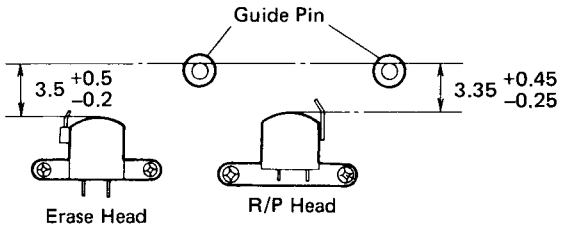


Fig. 28

Gap between Record Safety Lever and Record Slide Lever

1. The gap between the record safety lever and the record slide lever should be within 0.5 to 0.8mm.
2. If the gap is out of limits, adjust it by bending the part (A) of record slide lever.

Note: If the gap length exceeds 0.8mm, the recording circuit may be energize and the recorded signals may be erased when the REC button has happened to be pressed.

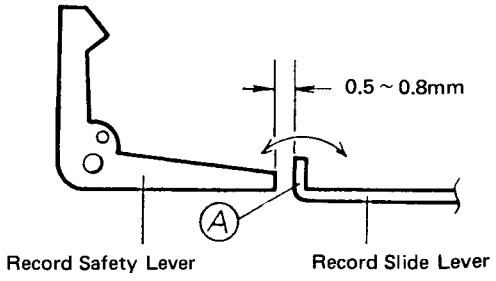


Fig. 29

Playback Torque

1. The playback torque should be within 40 to 70g-cm.
2. If the torque is less than 40g-cm, set the clutch spring to the 3 position. If it exceeds 70g-cm, set the clutch spring to the 1 position.
   Note: Before adjusting the torque wipe off the surface of rubber parts and rotating parts, if the torque is not sufficient.

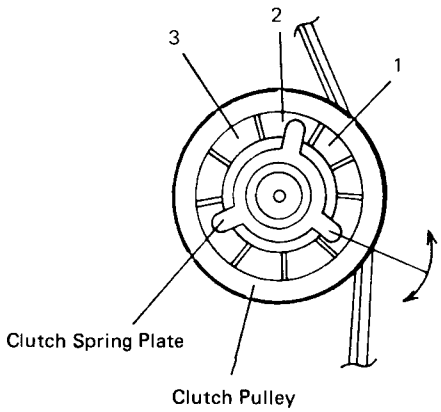


Fig. 30

Adjustment of F.F. & Rewind Torque

1. Fast Forward Torque

In the fast forward mode, check that the F.F. torque is within 60 to 150g-cm by applying the torque gauge to the take-up reel disk.

a. If the torque is less than 60g-cm, adjust as follows.
   1) If the rotation of F.F. idler which is contacted with the flywheel stops or fluctuates when the take-up reel disk is stopped turning by the fingers, bend the part A of F.F. button lever to the C-direction.
   2) If the F.F. idler contacted with the flywheel is turning constantly when the take-up reel disk is stopped turning, turn the three-flap clutch spring plate clockwise (4→3→2→1) to obtain the proper torque.

b. If the torque is over 150g-cm, turn the clutch spring plate counterclockwise (1→2→3→4) to obtain the proper torque.

2. Rewind Torque

In the rewind mode, check that the rewind torque is within 60 to 150g-cm by applying the torque gauge to the supply reel disk.

If the torque is out of standard, adjust it as same method as items a. & b. of "Fast Forward Torque".

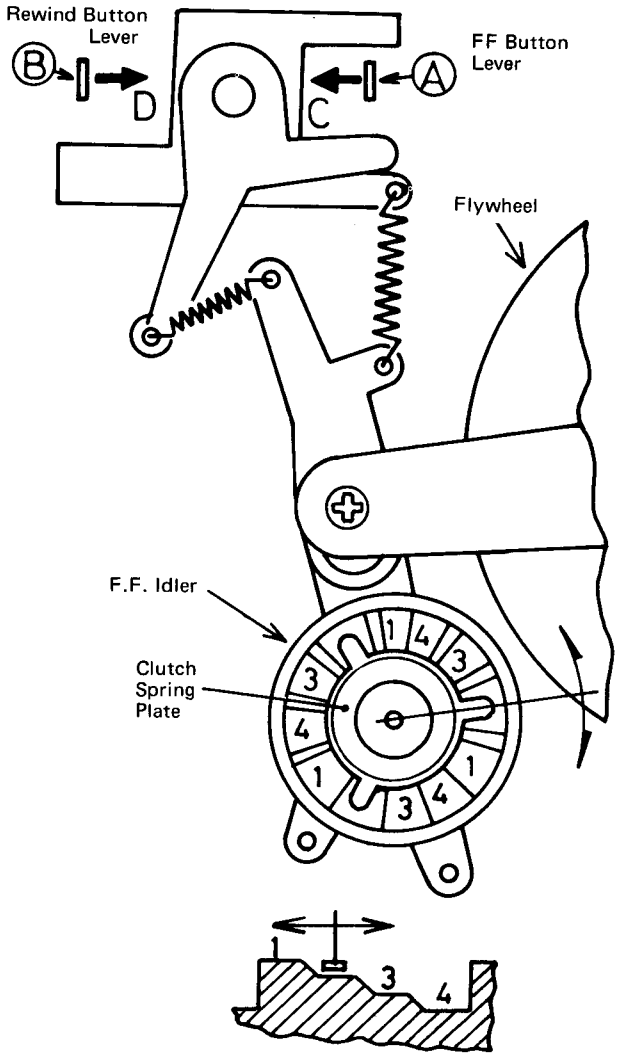


Fig. 31

Memory Facility

If the Memory facility is defective, treat as follows.

a. If the switch assembled in the tape counter is defective, change the counter.
b. If the counter does not turn:
   1) Check the counter belt. If it is defective, change it.
   2) Change the counter, if it is defective.
c. The memory switch mounted on the counter may be defective in contact. If it is change the switch.
d. The connecting wires may be open circuited.
e. The auto stop mechanism may be defective. Refer to the "Auto Stop Mechanism".

Tuner Alignment

Output Measuring: Speaker terminal (Impedance = 6Ω), output level 50mW (0.55V/6Ω)

AM IF & RF Alignment

Input (SSG) Modulation 400Hz, Modulated to 30%

Step	Frequency Band	Input Signal		Place to be aligned	Set the V. Capacitor to
		Frequency	Given to		
1	MW(IF)	455kHz	Loop Antenna	L13,14,17	Minimum
2		Repeat the Step 1, and adjust for no further improvement.			
3	MW	520kHz	Loop Antenna	L9	Maximum
4		1650kHz		C52	Minimum
5		Repeat the Steps 3 & 4.			
6		600kHz	Loop Antenna	L5	600kHz Signal
7		1400kHz		C7	1400kHz Signal
8		Repeat the Steps 6 & 7, and adjust for no further improvement.			
9	LW	145kHz	Loop Antenna	L10	Maximum
10		360kHz		C53	Minimum
11		Repeat the Steps 9 & 10.			
12		160kHz	Loop Antenna	L6	160kHz Signal
13		350kHz		C8	350kHz Signal
14		Repeat the Steps 12 & 13, and adjust for no further improvement.			
15	SW1	5.9MHz	Rod Antenna through Dummy Antenna	L11	Maximum
16		6.3MHz		C54	Minimum
17		Repeat the Steps 15 & 16,			
18		5.9MHz	Rod Antenna through Dummy Antenna	L7	5.9MHz Signal
19		6.3MHz		C38	6.3MHz Signal
20		Repeat the Steps 18 & 19, and adjust for no further improvement.			
21	SW2	5.8MHz	Rod Antenna through Dummy Antenna	L12	Maximum
22		18.6MHz		C55	Minimum
23		Repeat the Steps 21 & 22.			
24		6.0MHz	Rod Antenna through Dummy Antenna	L8	6.0MHz Signal
25		18.0MHz		C39	18.0MHz Signal
26		Repeat the Steps 24 & 25, and adjust for no further improvement.			

Note: Set the fine tuning knob to the centre position when aligning.

FM IF & Discriminator Alignment

Input (Sweep Generator) : TP3 (hot)
Output (Oscilloscope) : IF TP5 (hot) & TP8
Discriminator TP4 (hot) & TP8

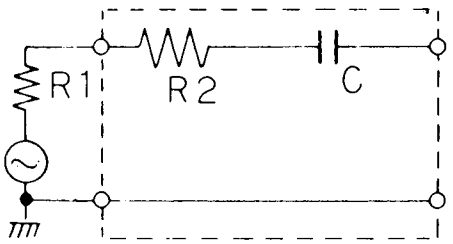
Step	Mode	Place to be aligned	Wave form
1	IF	L3	Peak
2	Discriminator	L15	S-curve

FM RF Alignment

Input (SSG): Use 75Ω terminal, modulation 400Hz modulated to 22.5kHz deviation.
Connect Hot side to TP1 and Cold side to TP2.

Step	Frequency Band	Input Signal		Place to be aligned	Set the V. Capacitor to
		Frequency	Given to		
1	FM	87.5MHz	TP1 & TP2	L4	Maximum
2		109MHz		C6	Minimum
3		Repeat the Steps 1 & 2.			
4		90MHz	TP1 & TP2	L1	90MHz Signal
5		106MHz		C5	106MHz Signal
6		Repeat the Steps 4 & 5, and adjust for no further improvement.			

Dummy Antenna



R1 + R2 = 80Ω
C = 10pF
R1 : Output impedance of S.S.G.

Fig. 32

Parts Arrangement for Alignment

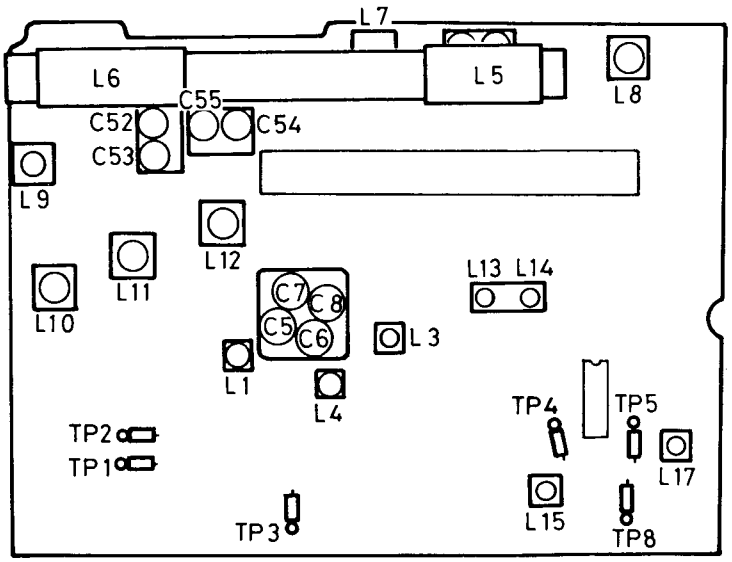


Fig. 33

Amplifier Alignment

Bias Frequency

1. Connect a frequency counter across TP1 & TP2.
2. Shift the BEAT CUT switch to the lower position.
3. Set the RC-550 in the recording mode.
4. Adjust L101 so that the frequency counter indicates 70±0.5kHz

Bias Current

1. Connect a V.T.V.M. across TP1 & TP2.
2. Adjust the variable resistor R168 so that the voltage becomes 7mV (700μA/10Ω).

Level Alignment of Peak Level Indicator

1. Supply the signal (1kHz, -60dBs) to the MIC terminal.
2. Set the RC-550 in the manual recording mode.
3. Adjust the REC LEVEL control so that the level meter indicates 0VU.
4. Adjust the variable resistor R128 so that the peak level indicator of "0" lights.

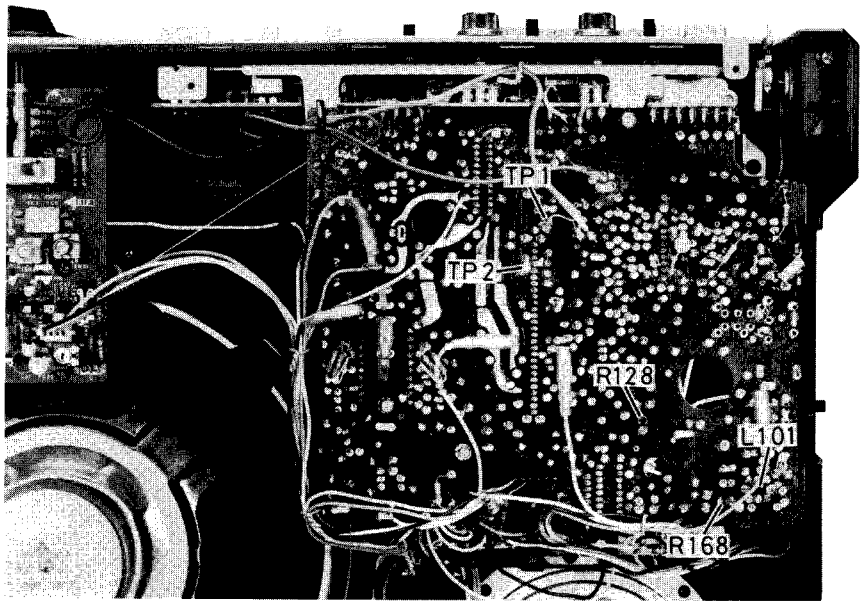


Fig. 34

How to Fit Dial Cord

1. Dial Cord
   Material : Tetoron
   Diameter of cord : 0.6mm (24 mil)
   Whole length of cord : 1120mm (44-1/8")
2. Take out the chassis of cabinet by removing the tuner circuit board and cassette mechanism.
3. Turn the dial drum fully counterclockwise.
4. Fit the cord in numerical order as shown in Fig. 35.
5. Engage 2 projections of dial drum with the slots of arm which is mounted on the shaft of variable capacitor as shown in Fig. 36, when mounting the tuner circuit board on the chassis.

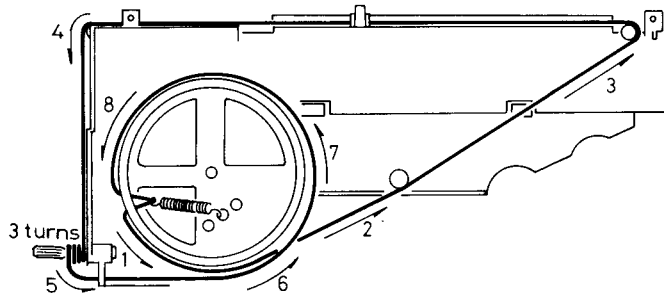


Fig. 35

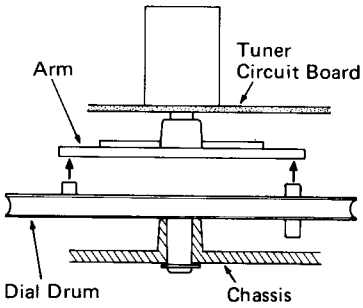


Fig. 36

Block Diagram

Tuner Section

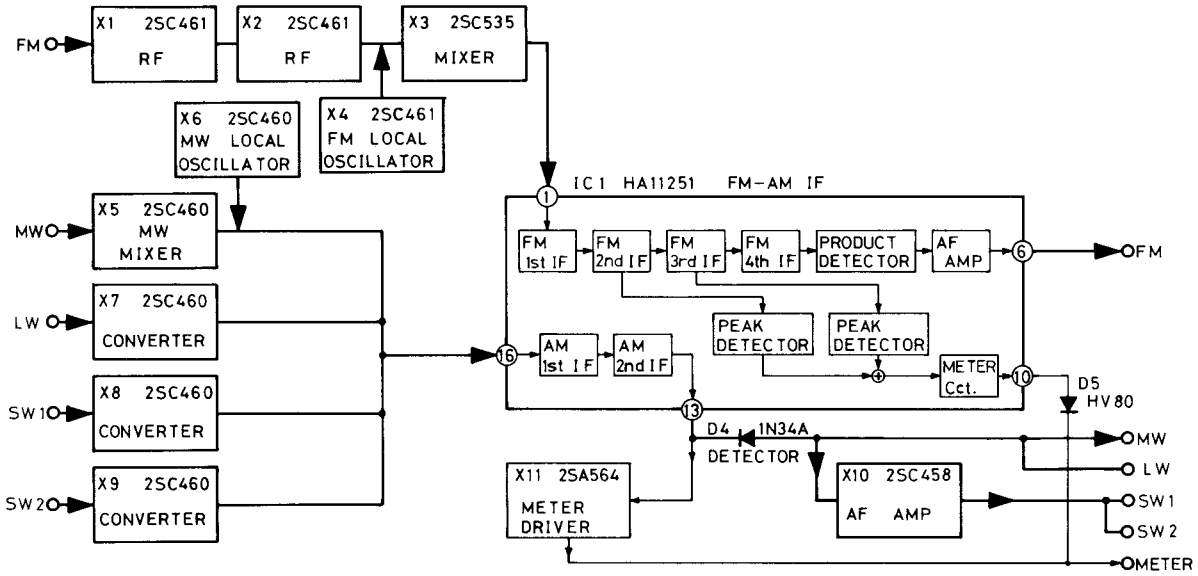


Fig. 37

Playback Mode

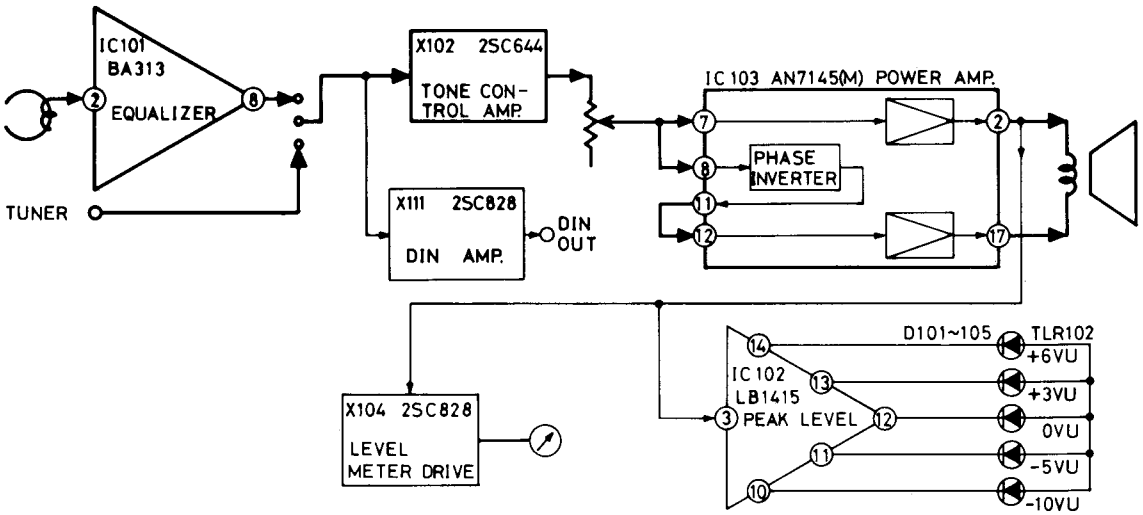


Fig. 38

Recording Mode

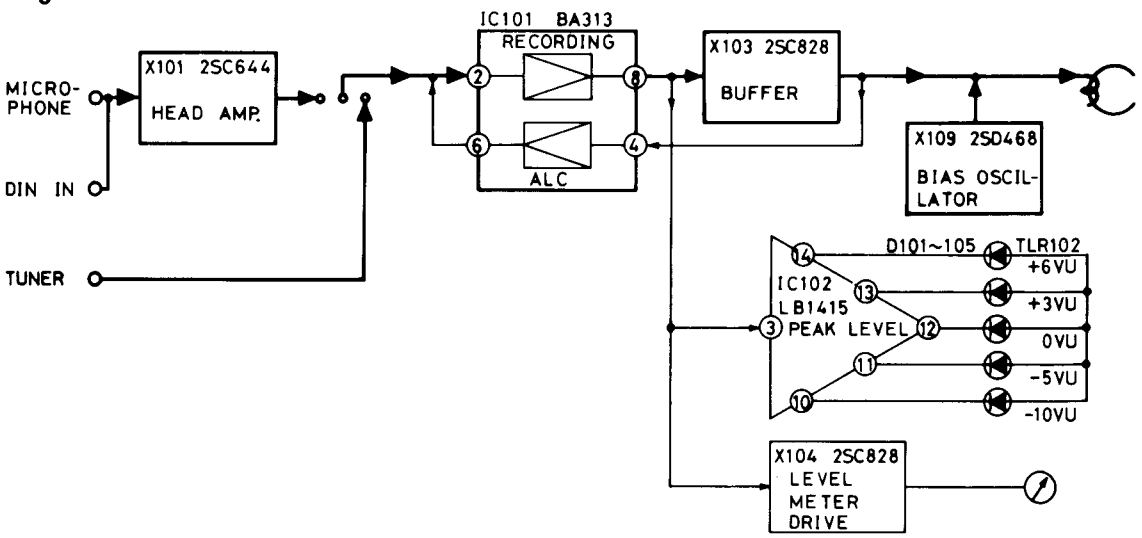
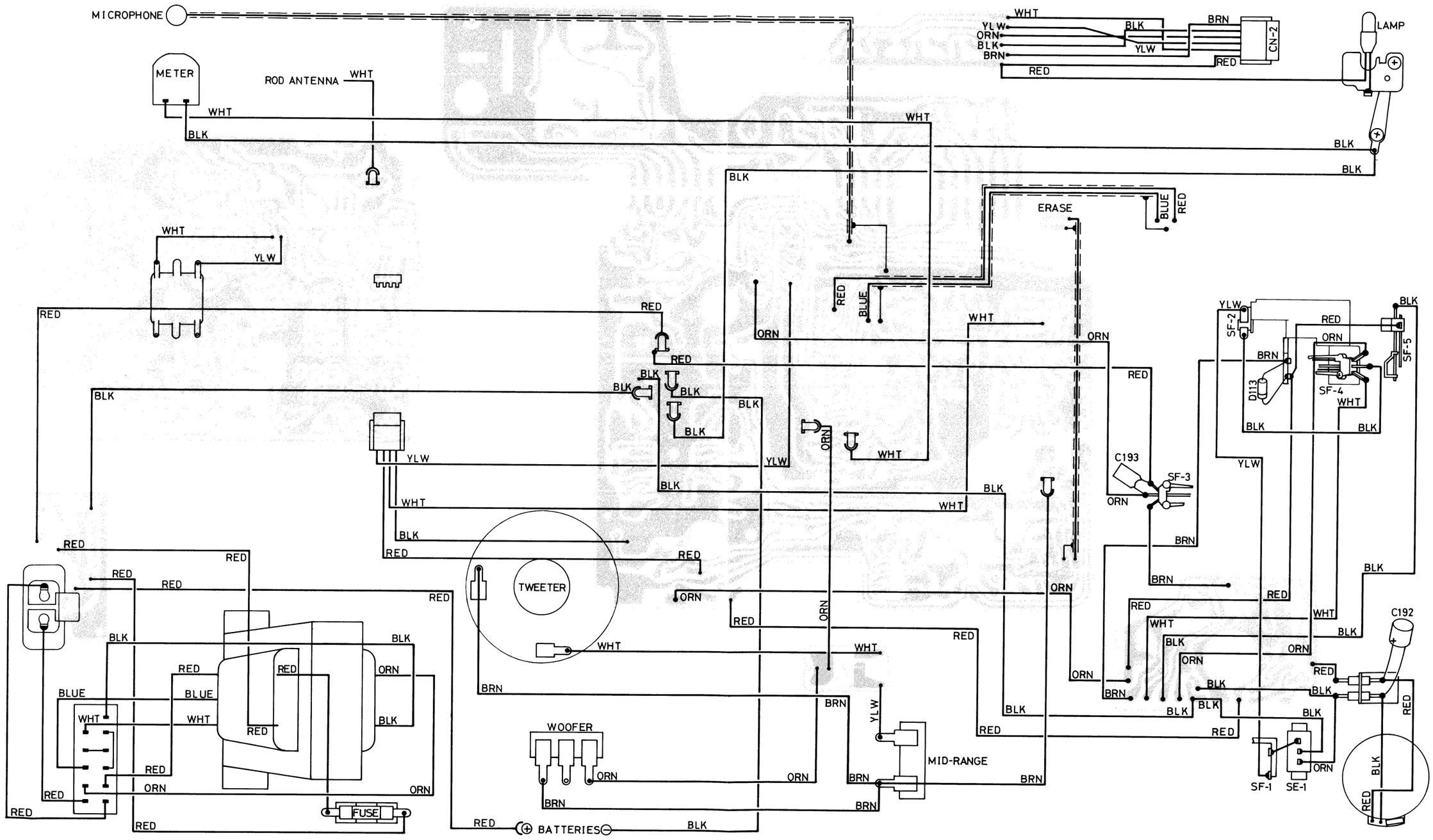


Fig. 39

Wiring Connection (RC-550L)


MICROPHONE
METER
ROD ANTENNA
WHT
BLK
WHT
YLW
RED
BLK
RED
BLK
BLK
BLK
YLW
WHT
BLK
RED
BLK
RED
BLK
RED
RED
RED

Schematic Diagram of RC-550L/LB (Tuner)

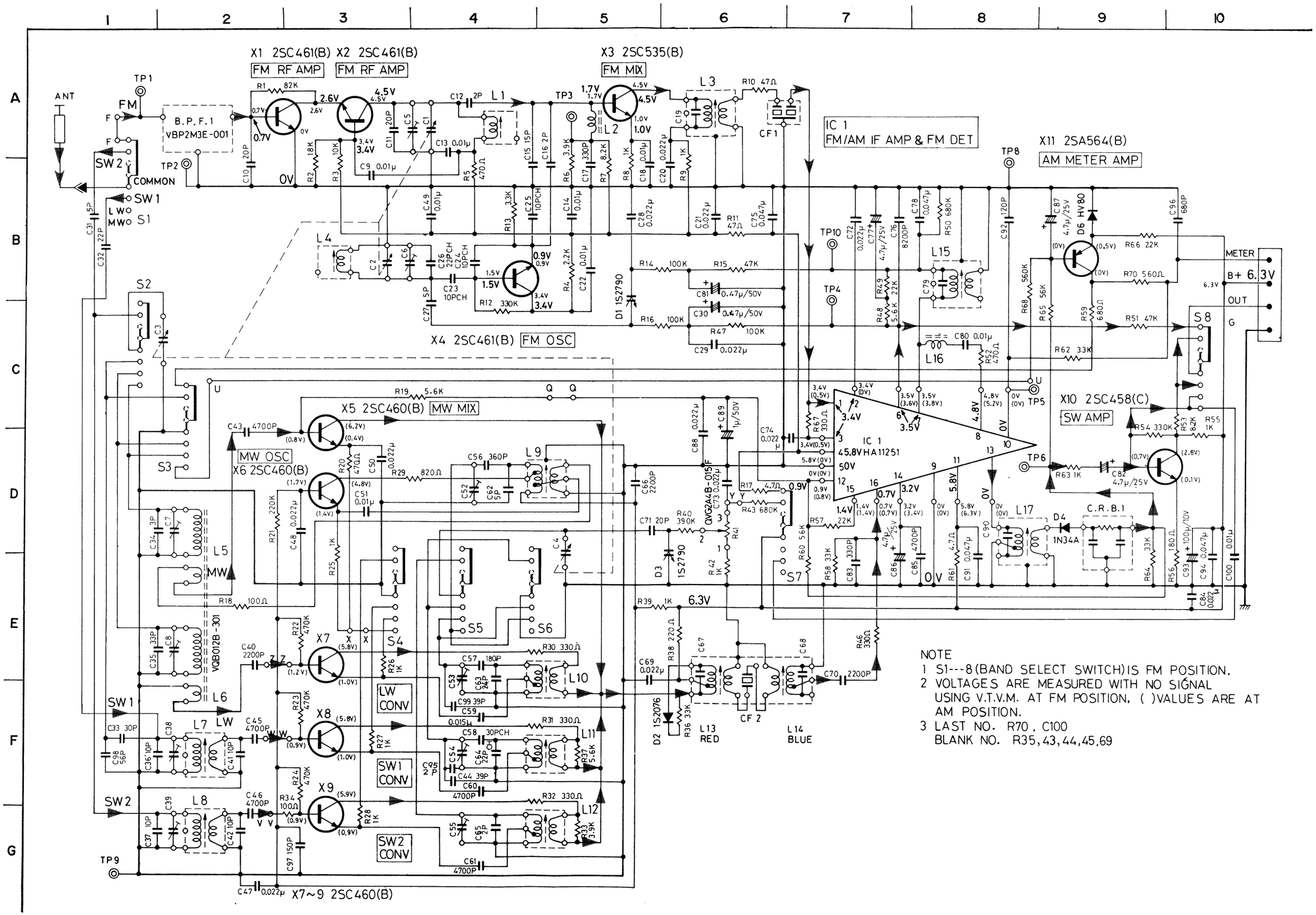
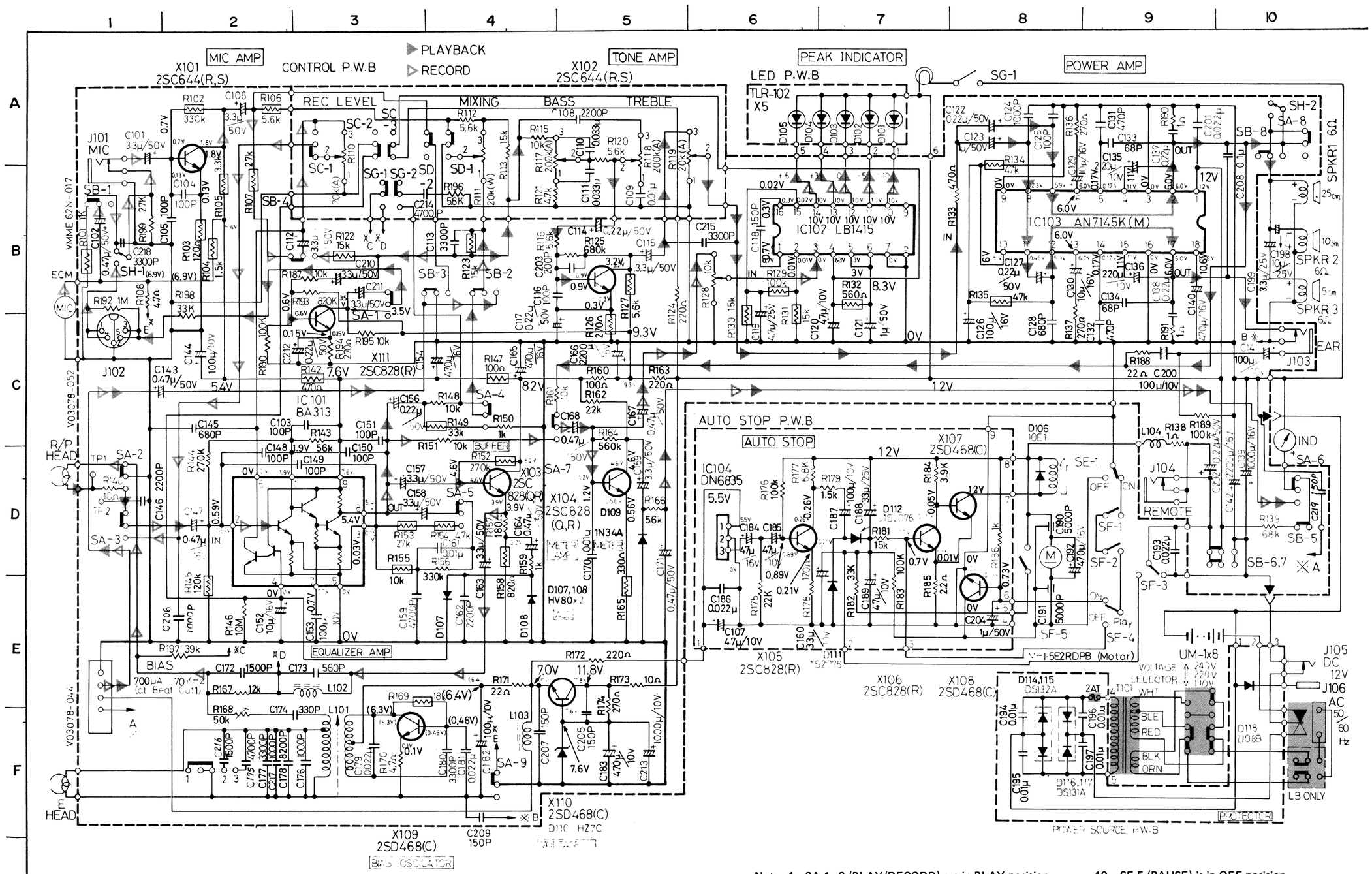


Fig. 41

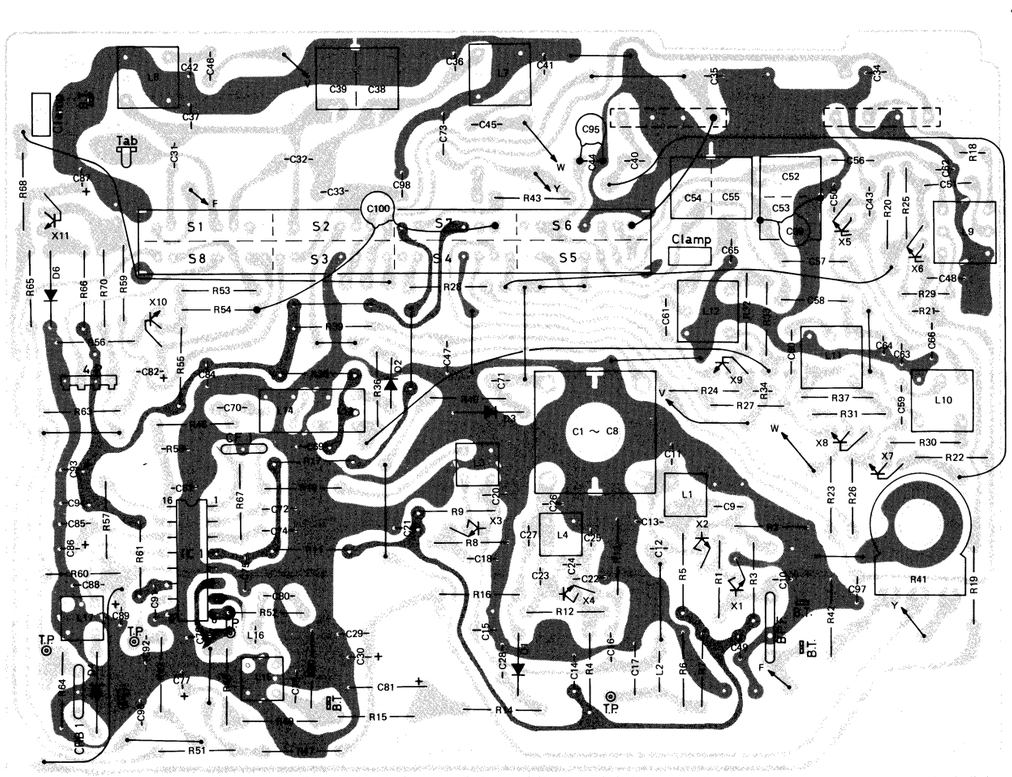
Schematic Diagram of RC-550L/LB (Amplifier)



Note:
1. SA-1~9 (PLAY/RECORD) are in PLAY position.
2. SB-1~8 (TAPE/RADIO) are in TAPE position.
3. SC-1~3 (AUTO/MANUAL) are in MANUAL position.
4. SD-1&2 (MIXING) are in OFF position.
5. SE-1 (MEMORY) is in ON position.
6. SF-1 (COUNTER) is in OFF position.
7. SF-2 (REWIND) is in OFF position.
8. SF-3 (MAIN) is in ON position.
9. SF-4 (PLAY) is in ON position.
10. SF-5 (PAUSE) is in OFF position.
11. SG-1 & 2 (CrO2/NORMAL) is in NORMAL position.
12. SH-1 & 2 (DIN) are in OFF position.
13. Voltages are measured by electronic voltmeter at no signal, in par. values are in recording mode.
14. Resistors which symbolic marks are surrounded with rectangulars are printed carbon resistors.
15. Shaded parts show safety assurance parts.

Fig. 42

Tuner Circuit Board Ass'y



Positive line Common line

Fig. 43

Note: The circuit board assembly will not be available as spare part.

Transistors

Ref. No.	Parts No.	Description	Pc	fT
X1,2,4	2SC461(B)	Silicon (HITACHI)	0.2W	230MHz
X3	2SC535(B)	〃 (〃)	0.1W	940MHz
X5,6,7,8,9	2SC460(B)	〃 (〃)	0.2W	230MHz
X10	2SC458(C)	〃 (〃)	〃	〃
X11	2SA564(Q)	〃 (MATSUSHITA)	0.25W	80MHz

IC & Diodes

Ref. No.	Parts No.	Parts Name	Description
IC1	HA11251	Integrated Circuit	HITACHI
D1,3	1S2790	Variable Capacitance Diode	〃
D2	1S2076	Silicon Diode	〃
D4	1N34A	Germanium Diode	〃
D6	HV80	Silicon Diode	〃

Resistors

Ref. No.	Parts No.	Parts Name	Description
R1	QRD141K-823	Carbon	82kΩ ¼W
R2	〃 -183	〃	18kΩ 〃
R3	〃 -103	〃	10kΩ 〃
R4	〃 -222	〃	2.2kΩ 〃
R5	〃 -471	〃	470Ω 〃
R6	〃 -392	〃	3.9kΩ 〃
R7	〃 -822	〃	8.2kΩ 〃
R8,9	〃 -102	〃	1kΩ 〃
R10,11	〃 -470	〃	47Ω 〃
R12	〃 -334	〃	330kΩ 〃
R13	〃 -332	〃	3.3kΩ 〃
R14,16	〃 -104	〃	100kΩ 〃
R15	〃 -473	〃	47kΩ 〃
R17	〃 -4R7	〃	4.7Ω 〃
R18	QRD143K-101	〃	100Ω 〃
R19	QRD141K-562	〃	5.6kΩ 〃
R20	〃 -471	〃	470Ω 〃
R21	QRD143K-224	〃	220kΩ 〃
R22,23,24	QRD141K-474	〃	470kΩ 〃
R25,26,27,28	〃 -102	〃	1kΩ 〃
R29	QRD143K-821	〃	820Ω 〃
R30,31,32	QRD141K-331	〃	330Ω 〃
R33	〃 -392	〃	3.9kΩ 〃
R34	〃 -101	〃	100Ω 〃
R36	〃 -333	〃	33kΩ 〃
R37	〃 -562	〃	5.6kΩ 〃
R38	〃 -221	〃	220Ω 〃
R39	〃 -102	〃	1kΩ 〃
R40	〃 -394	〃	390kΩ 〃
R41	QVG2A4B-015F	Variable	100kΩ, B-curve Fine Tuning
R42,45	QRD141K-102	Carbon	1kΩ ¼W
R43	〃 -684	〃	680kΩ 〃
R46	〃 -331	〃	330Ω 〃
R47	〃 -104	〃	100kΩ 〃

Ref. No.	Parts No.	Parts Name	Description	
R48	QRD141K-562	Carbon	5.6kΩ	¼W
R49	" -223	"	22kΩ	"
R50	" -684	"	680kΩ	"
R51	" -473	"	47kΩ	"
R52	" -471	"	470Ω	"
R53	" -822	"	8.2kΩ	"
R54	" -334	"	330kΩ	"
R55	" -102	"	1kΩ	"
R56	" -181	"	180Ω	"
R57	" -223	"	22kΩ	"
R58	QRD143K-333	"	33kΩ	"
R59	QRD141K-681	"	680Ω	"
R60	" -563	"	56kΩ	"
R61	" -4R7	"	4.7Ω	"
R62	" -332	"	3.3kΩ	"
R63	" -102	"	1kΩ	"
R64	" -333	"	33kΩ	"
R65	" -563	"	56kΩ	"
R66	" -223	"	22kΩ	"
R67	" -331	"	330Ω	"
R68	" -564	"	560kΩ	"
R70	" -561	"	560Ω	"

Capacitors

Ref. No.	Parts No.	Parts Name	Description	
C1~8	QAP1224-511	Variable		
C9	QCF11EZ-103	Ceramic	0.01μF	25V
C10,11	QCS11HJ-200	"	20pF	50V
C12,16	" -2R0	"	2pF	"
C13,18	QCF11EZ-103	"	0.01μF	25V
C14	QFM41HM-103	Mylar	"	50V
C15	QCS11HJ-150	Ceramic	15pF	"
C17	QFS21HJ-331	Polystyrol	330pF	"
C20,21,28,29	QFM41HM-223	Mylar	0.022μF	"
C22	QCF11EZ-103	Ceramic	0.01μF	25V
C23,24,25	QCT05CH-100	"	10pF	50V
C26	" -220	"	22pF	"
C27	QCS11HJ-5R0	"	5pF	"
C30	QEW41HA-474	Electrolytic	0.47μF	"
C31	QCS11HJ-5R0	Ceramic	5pF	"
C32	" -220	"	22pF	"
C33	" -300	"	30pF	"
C34	" -3R0	"	3pF	"
C35	" -330	"	33pF	"
C36,37	" -100	"	10pF	"
C38,39	QAT2002-001	Trimmer		
C40	QCY41HK-222	Ceramic	2200pF	50V
C41,42	QCS11HJ-100	"	10pF	"
C43,45,46	QCY41HK-472	"	4700pF	"
C44	QCS11HJ-390	"	39pF	"
C47,48,50	QFM41HM-223	Mylar	0.022μF	"
C49	QCF11EZ-103	Ceramic	0.01μF	25V
C51	QCY41HK-103	"	"	50V
C52-53,54-55	QAT2002-001	Trimmer		
C56	QCS11HJ-361	Ceramic	360pF	50V

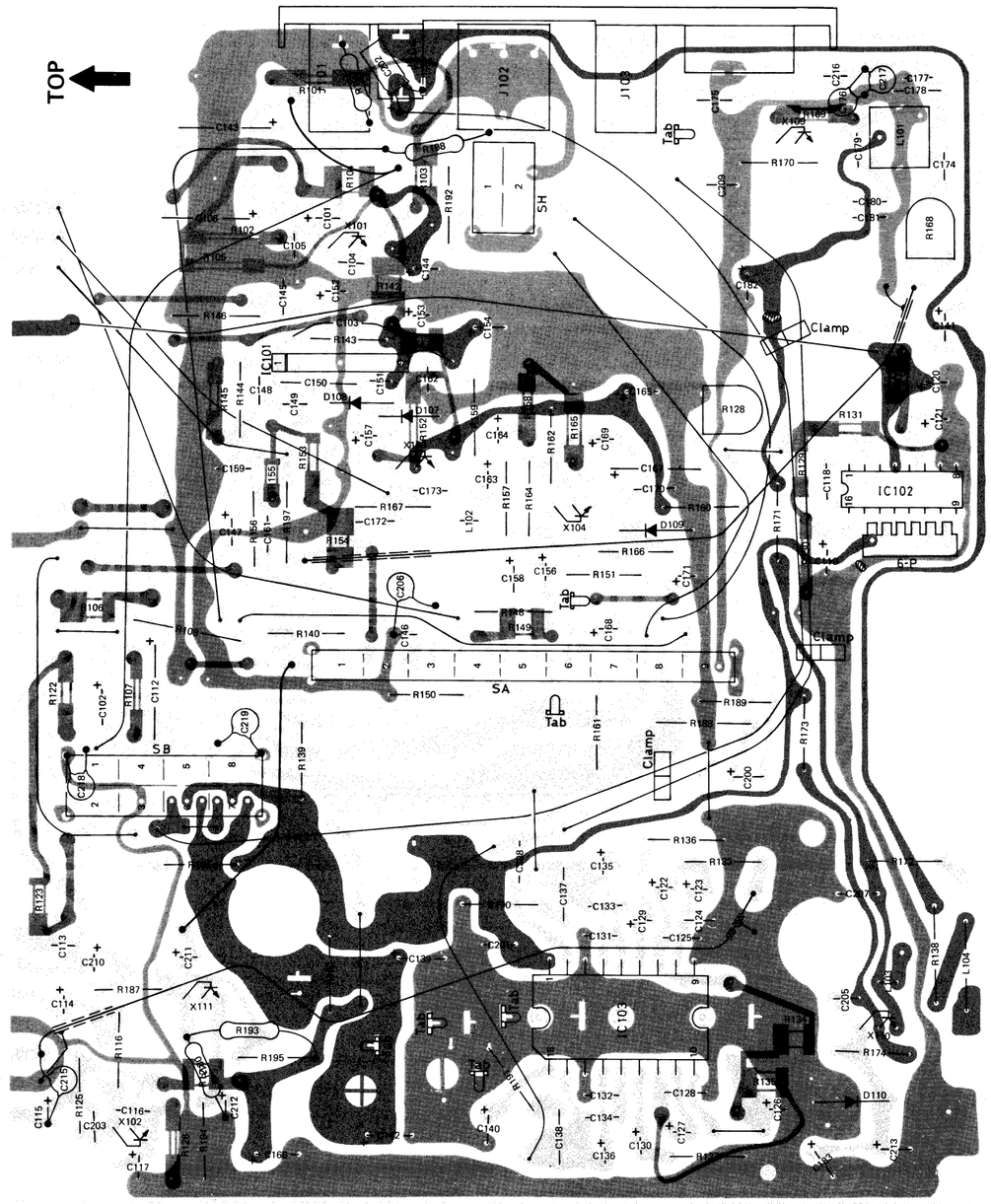
Ref. No.	Parts No.	Parts Name	Description	
C57	QFS21HJ-181	Polystyrol	180pF	50V
C58	QCT05CH-300	Ceramic	30pF	"
C59	QFM41HM-153	Mylar	0.015μF	"
C60,61	QCY41HK-472	Ceramic	4700pF	"
C62	QCS11HJ-5R0	"	5pF	"
C63	" -240	"	24pF	"
C64	QCT05CH-220	"	22pF	"
C65,95	QCS11HJ-2R0	"	2pF	"
C66,70	QCY41HK-222	"	2200pF	"
C69	QFM41HM-223	Mylar	0.022μF	"
C71	QCS11HJ-200	Ceramic	20pF	"
C72,73,74	QFM41HM-223	Mylar	0.022μF	"
C75,78	" -473	"	0.047μF	"
C76	QFM41HK-822	"	8200pF	"
C77	QEW41EA-475	Electrolytic	4.7μF	25V
C80	QFM41HM-103	Mylar	0.01μF	50V
C81	QEW21HA-474	Electrolytic	0.47μF	"
C82,86,87	QEW41EA-475	"	4.7μF	25V
C83	QCS11HJ-331	Ceramic	330pF	50V
C84,88	QFM41HM-223	Mylar	0.022μF	"
C85	QCY41HK-472	Ceramic	4700pF	"
C89	QEW41HA-105	Electrolytic	1μF	"
C91,94	QFM41HM-473	Mylar	0.047μF	"
C92	QCS11HJ-121	Ceramic	120pF	"
C93	QEW41AA-107	Electrolytic	100μF	10V
C96	QCY41HK-681	Ceramic	680pF	50V
C97	QCS11HJ-151	"	150pF	"
C98	" -560	"	56pF	"
C99	" -390	"	39pF	"
C100	QCY41HK-103	"	0.01μF	"

Others

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description
L1	V03105-030	Coil	FM RF
L2	03226-1K	Inductor	FM IF Trap
L3	VQT7F12-104	I.F.T.	FM
L4	V03105-029	Coil	FM Osc.
L5,6	*VQB012B-301	Bar Antenna Ass'y	MW, LW Antenna
L7	VQR1001-207	Coil	SW1 Antenna
L8	VQR1001-202	"	SW2 Antenna
L9	VQM1T03-301	"	MW Osc.
L10	*VQL1S02-301	"	LW Osc.
L11	03160-74	"	SW1 Osc.
L12	VQS1S02-302	"	SW2 Osc.
L13,14	V03067-026	I.F.T.	AM
L15	VQT7F12-104	"	FM
L16	03226-024	Inductor	
L17	VQT7A11-301	I.F.T.	AM
B.P.F.	VBP2M3E-001	Band Pass Filter	FM Antenna
CF1	V03059-014	Ceramic Filter	FM IF
CRB1	03126-15	CR Block	AM Detector
S1~8	QSR5685-200	Rotary Slide Switch	BAND
4-P	QMV5005-004	Plug Ass'y	4-pin
T.P.	V04041-1	Test Point	
Tab	V43895-1	Tab	
B. T.	VKL3143-001	Board in Tab	
Clamp	V44691-001	Wire Clamp	

Amplifier Circuit Board Ass'y



Positive line Common line (Negative)

Fig. 44

Note: The circuit board assembly will not be available as spare part.

Transistors

Ref. No.	Parts No.	Description	Pc	fT
X101,102	2SC644(R,S)	Silicon (MATSUSHITA)	0.15W	160MHz
X103,104	2SC828(Q,R)	〃 (〃)	0.25W	220MHz
X109,110	2SD468(C)	〃 (HITACHI)	0.9W	190MHz
X111	2SC828(R)	〃 (MATSUSHITA)	0.25W	220MHz

ICs & Diodes

Ref. No.	Parts No.	Parts Name	Description
IC101	BA313	Integrated Circuit	TOYO DENGU
IC102	LB1415	〃	SANYO
IC103	AN7145K(M)	〃	MATSUSHITA
D107,108	HV80	Silicon Diode	HITACHI
D109	1N34A	Germanium Diode	〃
D110	HZ7C	Zener Diode	〃

Resistors

Ref. No.	Parts No.	Parts Name	Description
R108	QRD141K-4R7	Carbon	4.7Ω ¼W
R116	〃 -562	〃	5.6kΩ 〃
R124	〃 -221	〃	220Ω 〃
R125	〃 -684	〃	680kΩ 〃
R128	QVP8A0B-014	Variable	10kΩ B-curve
R133	QRD141K-471	Carbon	470Ω ¼W
R136	〃 -271	〃	270Ω 〃
R137	〃 -271	〃	270Ω 〃
R138	QRD121J-1R0	〃	1Ω ½W
R139	QRD141K-683	〃	68kΩ ¼W
R140	〃 -100	〃	10Ω 〃
R141	〃 -682	〃	6.8Ω 〃
R143	〃 -563	〃	56kΩ 〃
R144	〃 -274	〃	270kΩ 〃
R146	QRD121J-106	〃	10MΩ ½W
R148	QRD141K-103	〃	10kΩ ¼W
R150	〃 -102	〃	1kΩ 〃
R151	〃 -103	〃	10kΩ 〃
R156	〃 -334	〃	330kΩ 〃
R157	〃 -181	〃	180Ω 〃
R159	〃 -102	〃	1kΩ 〃
R160	〃 -101	〃	100Ω 〃
R161	〃 -103	〃	10kΩ 〃
R162	〃 -222	〃	2.2kΩ 〃
R163	〃 -221	〃	220Ω 〃
R164	〃 -564	〃	560kΩ 〃
R166	〃 -562	〃	5.6kΩ 〃
R167	〃 -123	〃	12kΩ 〃
R168	QVP8A0B-054	Variable	50kΩ B-curve
R170	QRD141K-4R7	Carbon	4.7Ω ¼W
R171	〃 -220	〃	22Ω 〃
R172	〃 -221	〃	220Ω 〃
R173	〃 -100	〃	10Ω 〃
R174	〃 -271	〃	270Ω 〃
R180,189	〃 -104	〃	100kΩ 〃
R187	〃 -103	〃	10kΩ 〃

Ref. No.	Parts No.	Parts Name	Description
R188	QRG016J-220	Metal Oxide Film	22Ω 1W
R190,191	QRD141K-1R0	〃	1Ω 〃
R192	〃 -105	〃	1MΩ 〃
R193	〃 -824	〃	820kΩ 〃
R194	〃 -271	〃	270Ω 〃
R195	〃 -103	〃	10kΩ 〃
R197	〃 -393	〃	39kΩ 〃
R198	〃 -333	〃	33kΩ 〃
R199	〃 -273	〃	27kΩ 〃

Note: Other resistors are printed carbon resistors.

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C101	QEW41HA-335	Electrolytic	3.3μF 50V
C102	〃 -474	〃	0.47μF 〃
C103,104,105	QCS11HJ-101	Ceramic	100pF 〃
C106	QEW21HA-335	Electrolytic	3.3μF 〃
C112	〃 -335	〃	3.3μF 〃
C113	QCY41HK-332	Ceramic	3300pF 〃
C114	QEC81HM-224	Electrolytic	0.22μF 〃
C115	QEW41HA-335	〃	3.3μF 〃
C116	QCS11HJ-101	Ceramic	100pF 〃
C117	QEC81HM-224	Electrolytic	0.22μF 〃
C118	QCS11HJ-151	Ceramic	150pF 〃
C119	QEW41EA-475	Electrolytic	4.7μF 25V
C120	QEW41AA-476	〃	47μF 10V
C121,123	QEW41HA-105	〃	1μF 50V
C122,127	QEC81HM-224	〃	0.47μF 〃
C124	QCY41HK-102	Ceramic	1000pF 〃
C125	QCS11HJ-101	〃	100pF 〃
C126	QEW41AA-107	Electrolytic	100μF 10V
C128	QCY41HK-681	Ceramic	680pF 50V
C129,130	QEW41CA-106	Electrolytic	10μF 16V
C131,132	QCS11HJ-471	Ceramic	470pF 50V
C133,134	〃 -680	〃	68pF 〃
C135,136	QEW41AA-227D09	Electrolytic	220μF 10V
C137,138	QFM41HM-224	Mylar	0.22μF 50V
C139	QEW41CA-108	Electrolytic	1000μF 16V
C140	〃 -477	〃	470μF 〃
C141,144	QEW41AA-107	〃	100μF 10V
C142	QEW41CA-228	〃	2200μF 16V
C143	QEW21HA-474	〃	0.47μF 50V
C145	QCY41HK-681	Ceramic	680pF 〃
C146	QFM41HM-222	Mylar	2200pF 〃
C147	QEW41HA-474	Electrolytic	0.47μF 〃
C148,149	QCS11HJ-101	Ceramic	100pF 〃
C150,151	〃 -101	〃	100pF 〃
C152	QEW41CA-106	Electrolytic	10μF 16V
C153	QEW41AA-107	〃	100μF 10V
C154	QEW41CA-477	〃	470μF 16V
C156	QEC81HM-224	〃	0.22μF 50V
C157,158	QEW41HA-335	〃	3.3μF 〃
C159	QCY41HK-472	Ceramic	4700pF 〃
C161	QFM41HM-103	Mylar	0.01μF 〃
C162	QCY41HK-222	Ceramic	2200pF 〃
C163,169	QEW41HA-335	Electrolytic	3.3μF 〃
C164,168	〃 -474	〃	0.47μF 〃
C165	QEW41CA-477	〃	470μF 16V
C166	〃 -228	〃	2200μF 〃
C167	QEW21HA-474	Electrolytic	0.47μF 50V
C170	QCY41EK-103	Ceramic	0.01μF 25V
C171	QEW41HA-474	Electrolytic	0.47μF 50V
C172	QCY41HK-152	Ceramic	1500pF 〃
C173	QCS11HJ-451	〃	450pF 〃
C174	〃 -331	〃	330pF 〃
C175,177	QCY41HK-472	〃	4700pF 〃
C176	〃 -102	〃 1000pF	〃
C178	〃 -822	〃 8200pF	〃
C179	QFM41HM-223	Mylar 0.022μF	〃
C180	QCY41HK-332	Ceramic 3300pF	〃
C181	QFM41HM-223	Mylar 0.022μF	〃
C182	QEW41AA-107	Electrolytic 100μF	10V
C183	〃 -477D11	〃 470μF	〃
C200	〃 -107	〃 100μF	〃
C201	QFM41HM-223	Mylar 0.022μF	50V
C202	QEC81HM-224	Electrolytic 0.22μF	〃
C203	QCS11HJ-201	Ceramic 200pF	〃
C205,207,209	〃 -151	〃 150pF	〃
C206	QCY41HK-102	〃 1000pF	〃
C208	QFM41HM-104	Mylar 0.1μF	〃
C210,211	QEW41HA-335	Electrolytic 3.3μF	〃
C212	QEC81HM-224	〃 0.22μF	〃
C213	QEW41AA-108	〃 1000μF	10V
C215,218	QCY41HK-332	Ceramic 3300pF	50V
C216	〃 -152	〃 1500pF	〃
C217	〃 -102	〃 1000pF	〃
C219	QCS11HJ-151	〃 150pF	〃

Others

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description
L101	V03083-019	Coil	Bias Osc.
L102,103	03226-17	Inductor	
L104	T41572-001	〃	
SA1~9	QSS9201-001	Slide Switch	PLAY – RECORD
SB1~8	*QSS8201-012	〃	FUNCTION
SH1~2	QSP2210-061	Push Switch	DIN
J101,103,104	V03104-065	Jack Board Ass'y	
J102	QMC9014-006	DIN Socket	
6-P	QMV5005-006	Plug Ass'y	6-pin
Tab	V43895-1	Tab	
Clamp	V44691-001	Wire Clamp	

Control Circuit Board Ass'y

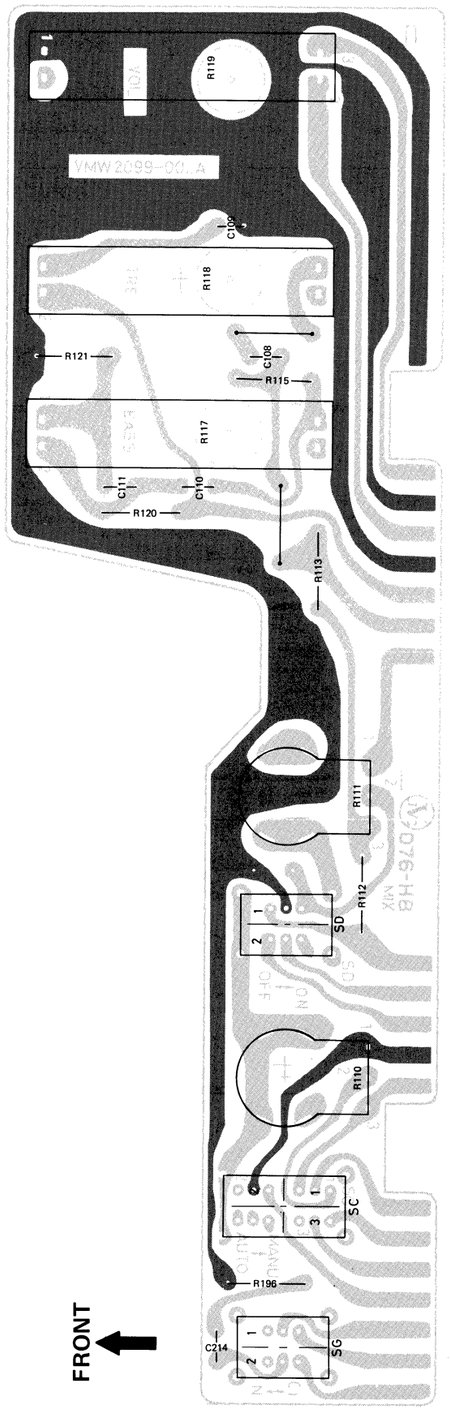


Fig. 45

Note: The circuit board assembly will not be available as spare part.

Resistors

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description
R110	QVG9A2A-024V	Variable	20kΩ A-curve
R111	QVG9A2W-024V	〃	〃 W-curve
R112	QRD141K-562	Carbon	5.6kΩ ¼W
R113	〃 -153	〃	15kΩ 〃
R115	〃 -103	〃	10kΩ 〃
R117,118	*QVT3A6A-025	Variable (Slide)	200kΩ A-curve
R119	*QVT3A6A-024	〃 (〃)	20kΩ 〃
R120	QRD141K-562	Carbon	5.6kΩ ¼W
R121	〃 -472	〃	4.7kΩ 〃
R196	〃 -562	〃	5.6kΩ 〃

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C108	QCY41HK-222	Ceramic	2200pF 50V
C109	QFM41HM-103	Mylar	0.01μF 〃
C110,111	〃 -333	〃	0.033μF 〃
C214	QCY41HK-472	Ceramic	4700pF 〃

Switches

Ref. No.	Parts No.	Parts Name	Description
SC1~3	QSL4218-001	Lever	AUTO-MANUAL
SD1,2	QSL2218-102	〃	MIXING
SG1,2	QSL2218-102	〃	TAPE

Auto Stop Circuit Board Ass'y

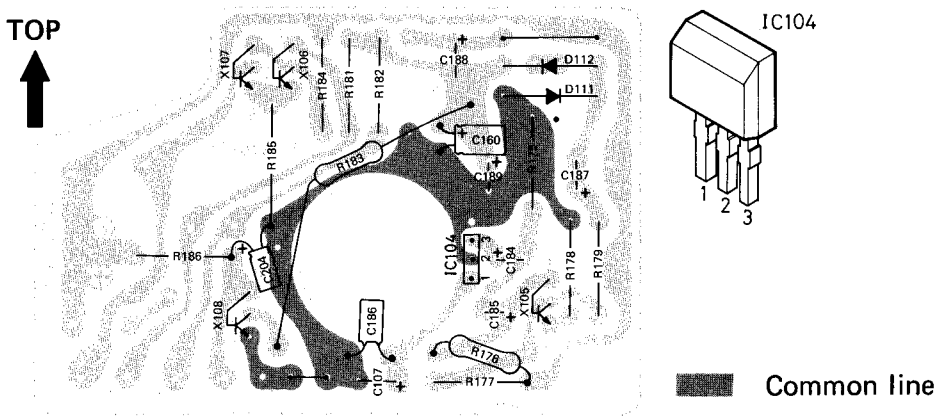


Fig. 46

Note: The circuit board assembly will not be available as spare part.

Transistors

Ref. No.	Parts No.	Description	Pc	fT
X105,106	2SC828(R)	Silicon (MATSUSHITA)	0.25W	220MHz
X107,108	2SD468(C)	" (HITACHI)	0.9W	190MHz

IC & Diodes

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description
IC104	DN6835	Hall IC	MATSUSHITA
D111,112	1S2076	Silicon Diode	HITACHI

Resistors

Ref. No.	Parts No.	Parts Name	Description	
R175	QRD141K-223	Carbon	22kΩ	¼W
R176	" -104	"	100kΩ	"
R177	" -682	"	6.8kΩ	"
R178	" -121	"	120Ω	"
R179	" -152	"	1.5kΩ	"
R181	" -153	"	15kΩ	"
R182	" -333	"	33kΩ	"
R183	" -104	"	100kΩ	"
R184	" -392	"	3.9kΩ	"
R185	QRC121K-2R2	Composition	2.2Ω	½W
R186	QRD141K-102	Carbon	1kΩ	¼W

Capacitors

Ref. No.	Parts No.	Parts Name	Description	
C107	QEW41AA-476	Electrolytic	47μF	10V
C160	" -336	"	33μF	"
C184	QEW41CA-476	"	47μF	16V
C185,189	QEW41AA-476	"	"	10V
C186	QFM41HM-223	Mylar	0.022μF	50V
C187	QEW41AA-107	Electrolytic	100μF	10V
C188	QEC81EM-336	"	33μ	25V
C204	QEW41HA-105	"	1μF	50V

Divider Circuit Board Ass'y

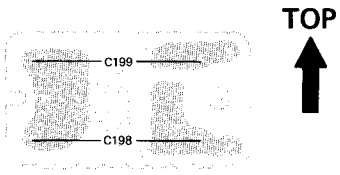


Fig. 47

Note: The circuit board assembly will not be available as spare part.

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C198	QEN21EM-106	Non-polarized Electrolytic	10μF 25V
C199	〃 -335	〃	3.3μF 〃

— Continued from page 27 —

Ref. No.	Parts No.	Parts Name	Description	Q'ty
111	SPSP2011Z	Screw		3
112	SPSP2607Z	〃		3
113	SPSP2610Z	〃		1
114	SPSX2006Z	P.M. Screw		1
115	REE1200	E-Ring		2
116	REE1500	〃		3
117	REE2000	〃		3
118	REE2500	〃		2
119	REE3200	〃		1
120	REE4000	〃		2

List of Cassette Mechanism

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*12380181ZT	Chassis Ass'y		1
2	*12380292ZT	Push Button Composite Ass'y		1
3	11320291ZT	Push Button Switch Ass'y		1
4	*VXP4018-00A	Push Button	PAUSE, PLAY, CUE, REVIEW	4
5	*VXP4018-00B	"	REC	1
6	*VXP4018-00C	"	EJECT/STOP	1
7	*12380481ZT	Head Panel Ass'y		1
8	V03078-052	Play/Record Head		1
9	480408T	Spring		1
10	4080402T	Head Stud		1
11	WNS2000N	Washer		1
12	V03078-044	Erase Head		1
13	4630402T	Collar		2
14	4080430T	Wire Holder		1
15	4080405BT	RQ. Spring		1
16	4080412T	Collar		1
17	4080411T	"		2
18	4080413T	Spring		2
19	8290481ZT	Pinch Roller Ass'y		1
20	6680501T	Pinch Roller Spring		1
21	5720695ZT	Reel Disk Ass'y	Take-up, Supply	2
22	040508T	Spring	Back Tension	1
23	*12380791ZT	Clutch Ass'y		1
24	4080710T	Spring		1
25	6680891ZT	FF Idler Ass'y		1
26	581316T	Spring		1
27	8870301T	Record Slide Lever		1
28	090311T	Collar		1
29	*12380301T	Record Spring Plate		1
30	1011105T	Spring		1
31	2680503T	Record Safety Lever		1
32	1320303T	Spring		1
33	4080901T	Brake Arm		1
34	8200902T	Spring		1
35	4080903T	Brake Function Plate		1
36	4080807T	RQ. Lever		1
37	110505T	Special Washer		1
38	4080811T	Spring		1
39			Blank No.	
40	4081081ZT	Rewind Idler Arm Ass'y		1
41	2110902T	Rewind Idler		1
42	020905BT	Spring		1
43	————	Tube	ϕ4 x ϕ3 x L16	1
44	4080806T	RQ. Function Plate		1
45	4080815T	Rewind Function Plate		1
46	————	Tube	ϕ4.5 x ϕ3.5 x L6.5	1
47	4080804T	FF Function		1
48	4080810T	Spring		2
49	110505T	Special Washer		1
50	4081581ZT	Slide Lever Ass'y		1
51	4081510T	Spring		1
52	4081503T	Pinch Roller Arm Lever		1
53	2381304T	Collar		1
54	5581681ZT	Pause Slide Lever Ass'y		1
55	5421801T	Pause Lever		1
56	5421803T	Pause Lever Spring		1
57	4081405T	Auto Stop Lever		1
58	5421401T	Collar		1
59	020708T	Spring		1
60	WNS2600	Washer		1
61	6681491ZT	Solenoide Ass'y		1
62	*12381906T	Stud (S)		1
63	6681401T	Bracket		1
64	9731401T	Pause Switch	SF-5	1
65	8202001T-002	Memory Switch Bracket		1
66	6251804T	Main Switch	SF-3, SF-4: (V44737-001)	2
67	5190109T	Leaf Switch	SF-2	1
68	*12381905T	Bracket (S)		1
69	10451101ZT	Flywheel Ass'y		1
70	5421101T	Flywheel Block		1
71	031504T	Special Washer		2
72	031503T	"		1
73	4081195ZT	Flywheel Bracket Ass'y		1
74	060405T	Spring		1
75			Blank No.	
76	8201201T	Motor Bracket		1
77	4081211T	Motor Collar		3
78	T45687-001	Rubber Cushion		3
79	031501T	Washer		3
80	*12381294ZT	Motor Ass'y	with Pulley (10621201T)	1
81	973120T	Main Belt		1
82	*12381701T	Counter Bracket		1
83	*VKC6104-001T	Memory Counter		1
84	*12391491ZT	Magnet Ass'y		1
85	8001602T	Counter Belt		1
86	8201801T	Switch Bracket		1
87	*12381601T	Side Bracket (R)		1
88	*12381602T	Side Bracket (L)		1
89	4660901T	Wire Holder	(VKZ4001-007)	1
90	*12381604T	Amp. Bracket		1
91	*12381603T	Cabinet Bracket		1
92	4080115T	Pack Spring		1
93	*12380102T	Amp. Stud		1
94	970906T	Rubber Sheet		1
95	RDS3000F	CS-Ring		1
96			Blank No.	
97	LPSP2003Z	Ass'y Screw		3
98	LPSP2004Z	"		1
99	LPSP2005Z	"		4
100	LPSP2008Z	"		2
101	LPSP2604Z	"		3
102	LPSP2605Z	"		7
103	LPSP2606Z	"		2
104	LPSP2607Z	"		1
105	LPSP3006ZS	"		2
106		"	Blank No.	
107	SDSP2604Z	Screw		2
108	SDSP2606Z	"		1
109	SPSD2604Z	TH Tap. Screw		10
110	SPSP2008Z	Screw		2

— Continued on page 24 —

Exploded View of Amplifier Ass'y (1)

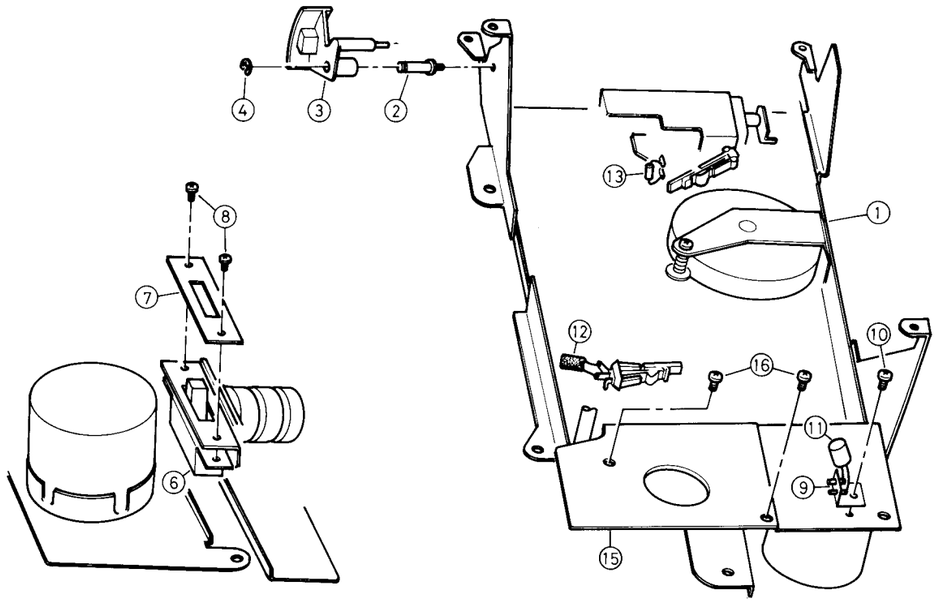


Fig. 52

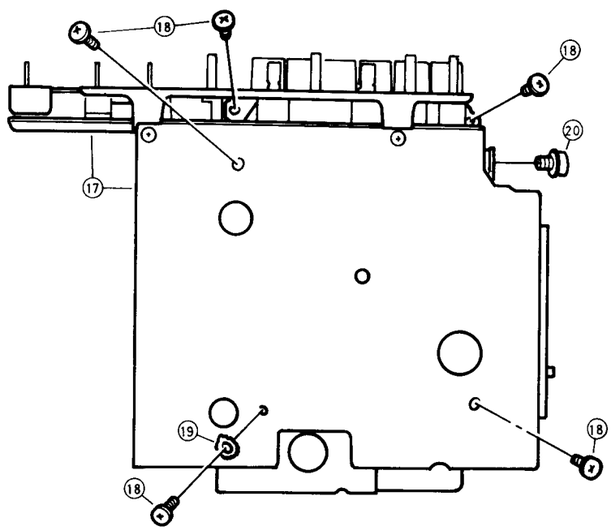


Fig. 53

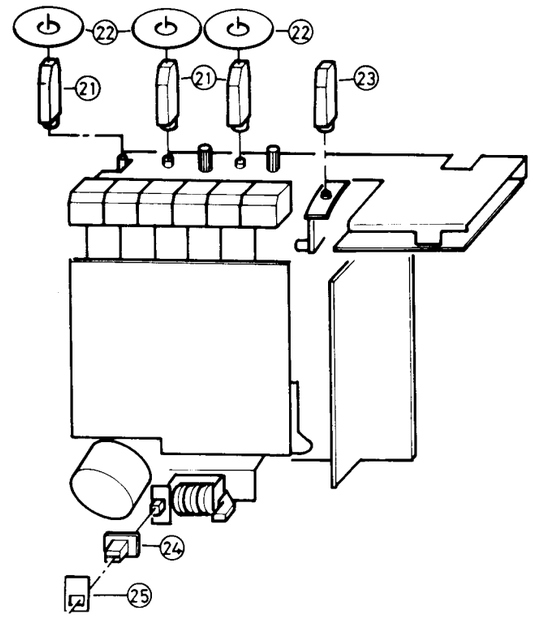


Fig. 54

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*————	Cassette Mechanism		1
2	*VKH3008-001	Flange Shaft		1
3	*VXQ3012-001	Toggle Lever		1
4	V44239-001	Bowed Ring		1
5			Blank No.	
6	QSS1219-101	Slide Switch	SE-1 (Memory)	1
7	*V44828-002	Spacer		1
8	SPSP2004Z	Screw		2
9	V03082-2	Feedthru Capacitor	C190,191	1
10	SPSP2606Z	Screw		1
11	QEW41CA-477	Electrolytic Capacitor	C192 (470μF, 16V)	1
12	QFM41HM-223	Mylar Capacitor	C193 (0.022μF, 50V)	1
13	10E1	Silicon Diode	D113	1
14			Blank No.	
15	*————	Circuit Board Ass'y	Auto Stop	1
16	SPSP2606Z	Screw		2
17	*————	Circuit Board Ass'y	Amplifier & Control	1
18	SPSP2606Z	Screw		5
19	WBS2600N	Toothed Lock Washer		1
20	DPSP3006ZS	Screw		1
21	VXQ4012-003	Lever Cap		3
22	VYTR406-001	Dust Spacer		3
23	VXQ4012-002	Lever Cap		1
24	*V44687-003	Memory Knob		1
25	*VYTA427-001	Spacer		1

LED Circuit Board Ass'y

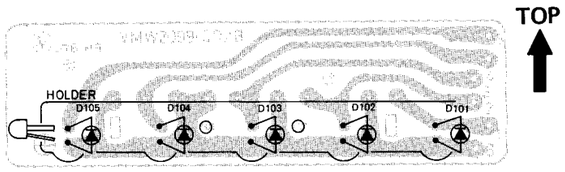


Fig. 48

Note: The circuit board assembly will not be available as spare part.

Diodes

Ref. No.	Parts No.	Parts Name	Description
D101~105	TLR102	Light Emitting Diode	TOSHIBA

Others

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description
HOLDER	*VYH4247-002	LED Holder	

Power Supply Circuit Board Ass'y (RC-550L)

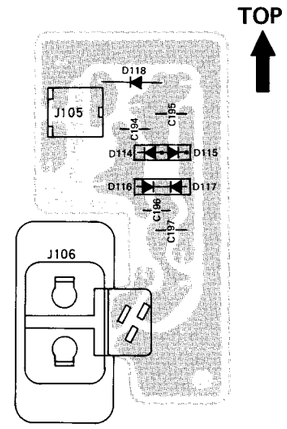


Fig. 49

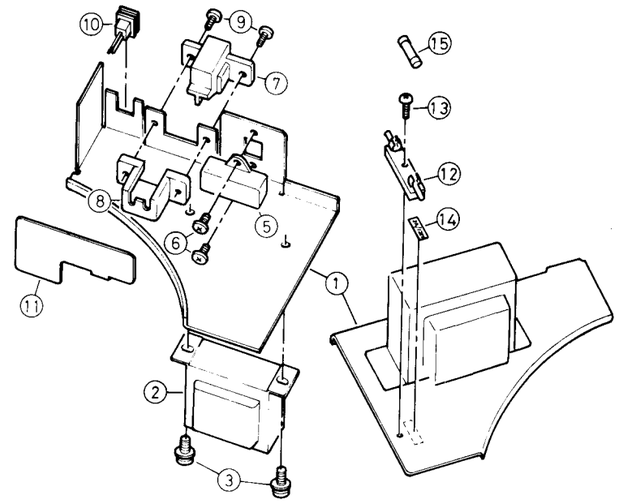


Fig. 50

Diodes

Ref. No.	Parts No.	Parts Name	Description
D114,115	DS132A	Silicon Diode (Stack)	SANYO ⚠
D116,117	DS131A	" (")	" ⚠
D118	U08B	"	HITACHI ⚠

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C194~197	QCF11EZ-103	Ceramic	0.01μF 25V

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VYH3123-001	Chassis		1
2	VTP57N2-12A	Power Transformer	⚠ T101	1
3	DPSP4008ZS	Ass'y Screw		2
4			Blank No.	
5	QSS2325-005	Slide Switch	⚠	1
6	SPSP3004ZS	Screw		2
7	QMC0263-001	AC Socket Ass'y	⚠ J106	1
8	V44399-00D	Cap	⚠	1
9	SPSP2608Z	Screw		2
10	*QMA1221-005	DC Jack Ass'y	⚠ J105	1
11	*————	Circuit Board Ass'y	Power Supply	1
12	QMG1321-002	Fuse Holder	⚠	1
13	SBSB2608Z	Screw		1
14	VND4003-009	Fuse Label	Glued	1
15	QMF51A2-2R0	Fuse	⚠ 2AT	1

Note: 1. The circuit board assembly will not be available as spare part.
2. The parts marked ⚠ are the important parts for safety assurance.
Use the specified part, when replacing the safety assurance part, never use an equivalent one.

Exploded View of Cassette Mechanism

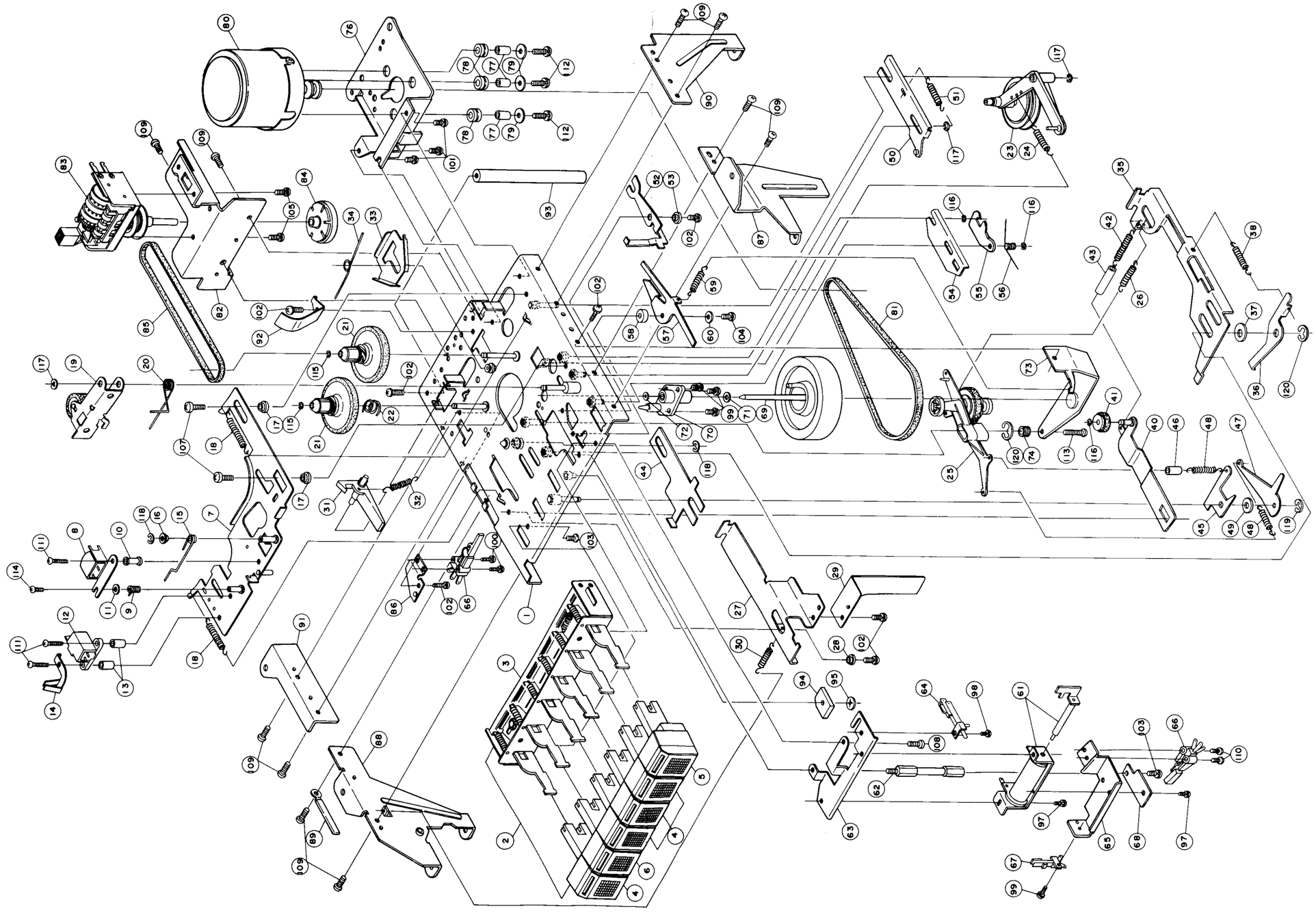


Fig. 51

Exploded View of Amplifier Ass'y (2)

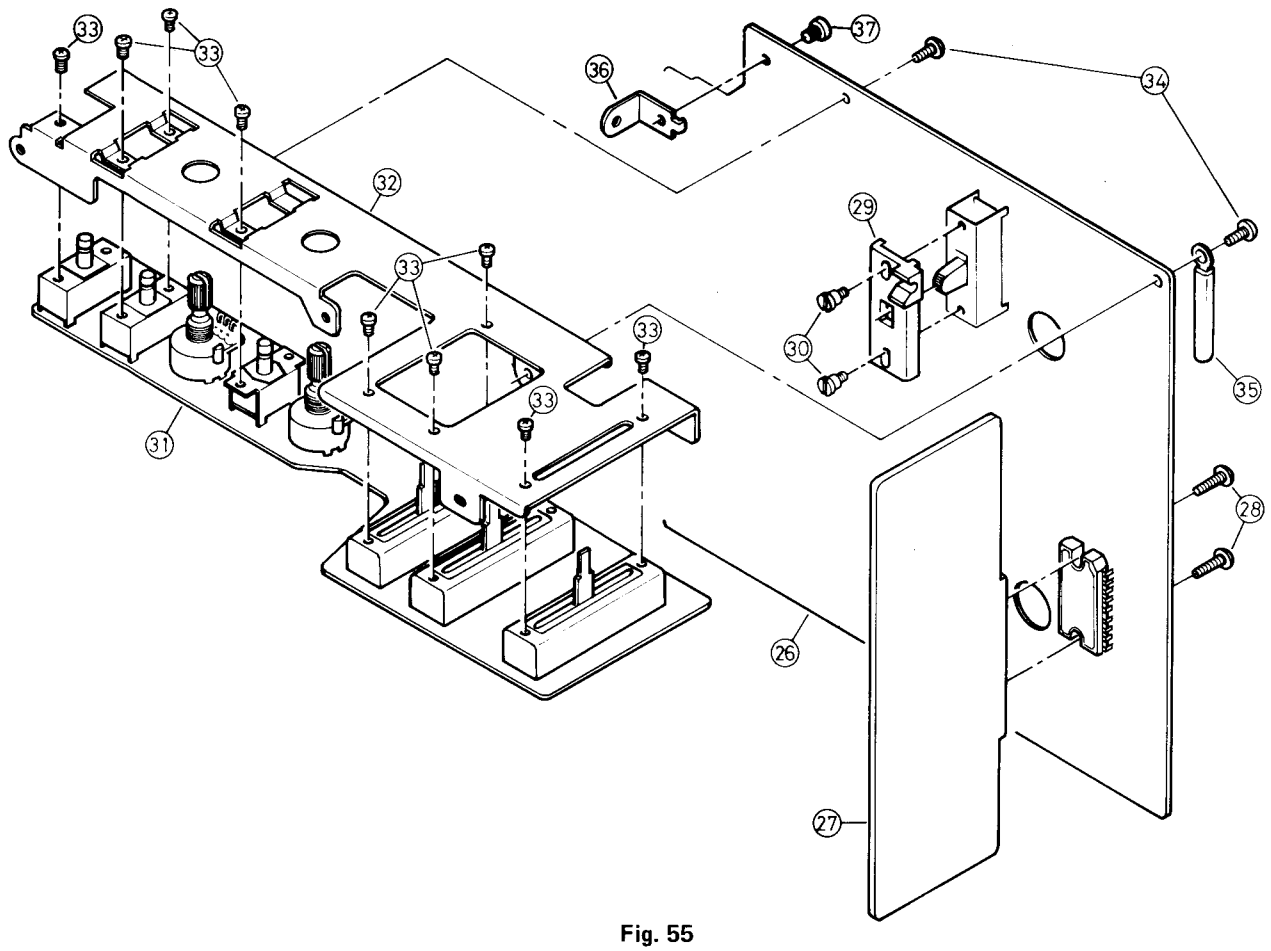


Fig. 55

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
26	*————	Circuit Board Ass'y	Amplifier	1
27	*VYH4228-001	Radiation Plate		1
28	SPSP3010ZS	Screw		2
29	*VYH3125-001	Slider		1
30	V42583-2	Stud		2
31	*————	Circuit Board Ass'y	Control	1
32	*VYH3124-001	Control Bracket		1
33	SPSP2604Z	Screw		9
34	SBSB3006Z	"		2
35	VKZ4001-007	Wire Holder		1
36	VYH4190-002	Contact		1
37	SPSP3006ZS	Screw		1

Exploded View of Chassis Ass'y

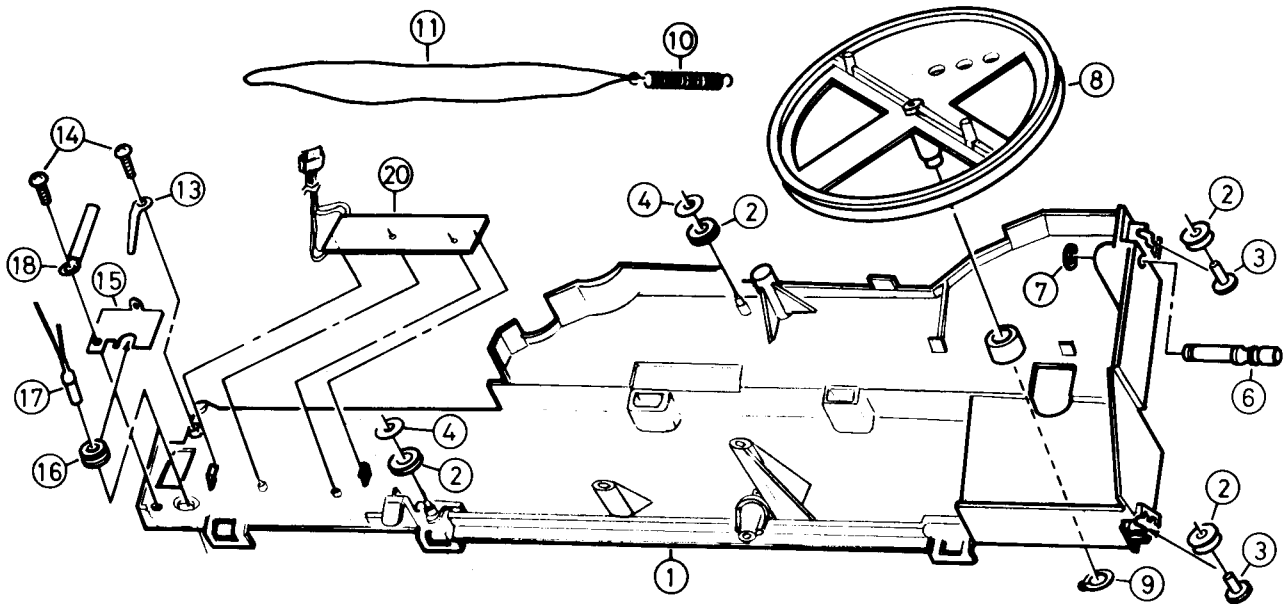


Fig. 56

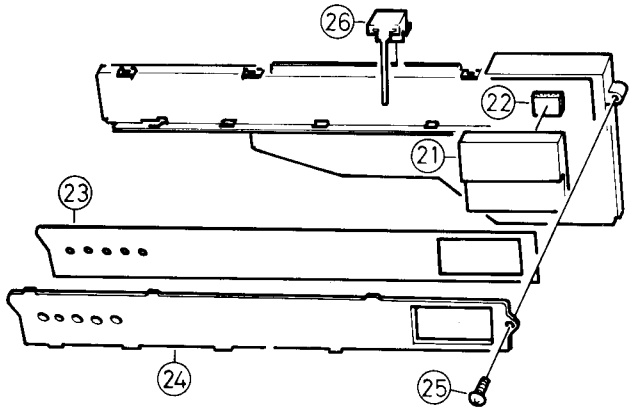


Fig. 57

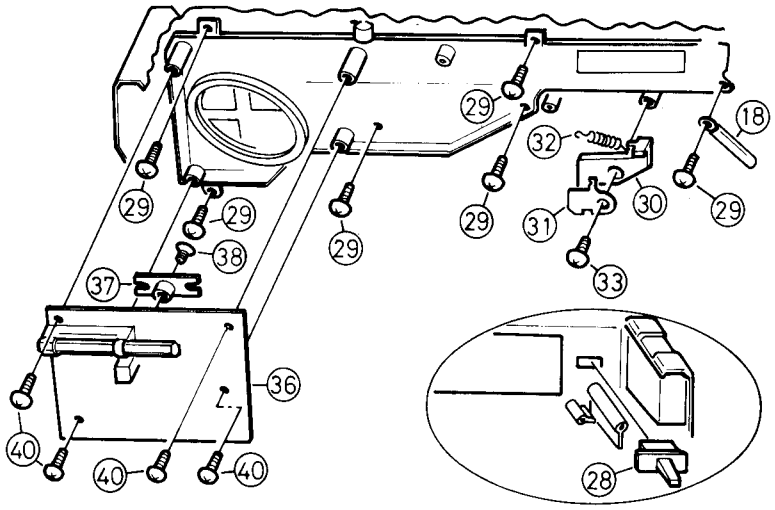


Fig. 58

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VYH1108-001	Chassis		1
2	VYH4002-001	Roller		4
3	RTA4008	Rivet		2
4	V42562-1	Special Washer	Heat-caulked	2
5			Blank No.	
6	V41336-024	Tuning Shaft		1
7	REE3000	E-Ring		1
8	*VYH4220-001	Drum		1
9	RCSA6000	C-Ring		1
10	50153-3	Spring		1
11	VHR2TT9-06A	Dial Cord		1
12			Blank No.	
13	*VYH4264-001	Contact		1
14	SBSB3008Z	Screw		2
15	*VYH4266-001	Clamp		1
16	53492-002	Rubber Bushing		1
17	QLP3101-333	Pilot Lamp	12V/55mA	1
18	VKZ4001-007	Wire Holder		1
19			Blank No.	
20	*————	Circuit Board Ass'y	LED	1
21	*VGM0120-008	Indicator		1
22	*VYSH108-013	Spacer	Glued	1
23	*VJK3109-001	Dial Back		1
24	*VJK2111-004	Dial Scale		1
25	SBSB3010Z	Screw		1
26	*VJN4015-00A	Needle		1
27			Blank No.	
28	*VXP4017-001	Check Light Knob		1
29	SBSB3016Z	Screw		6
30	*VYH3121-001	Hook Lever		1
31	*VYH4232-001	Plate		1
32	50153-008	Spring		1
33	SBSB3008Z	Screw		1
34			Blank No.	
35			"	
36	*————	Circuit Board Ass'y	Tuner	1
37	*VYH4221-001	Arm		1
38	SSSP2608Z	Screw		1
39			Blank No.	
40	SBSB3012C	Screw		4

Exploded View of Front Cabinet (RC-550L)

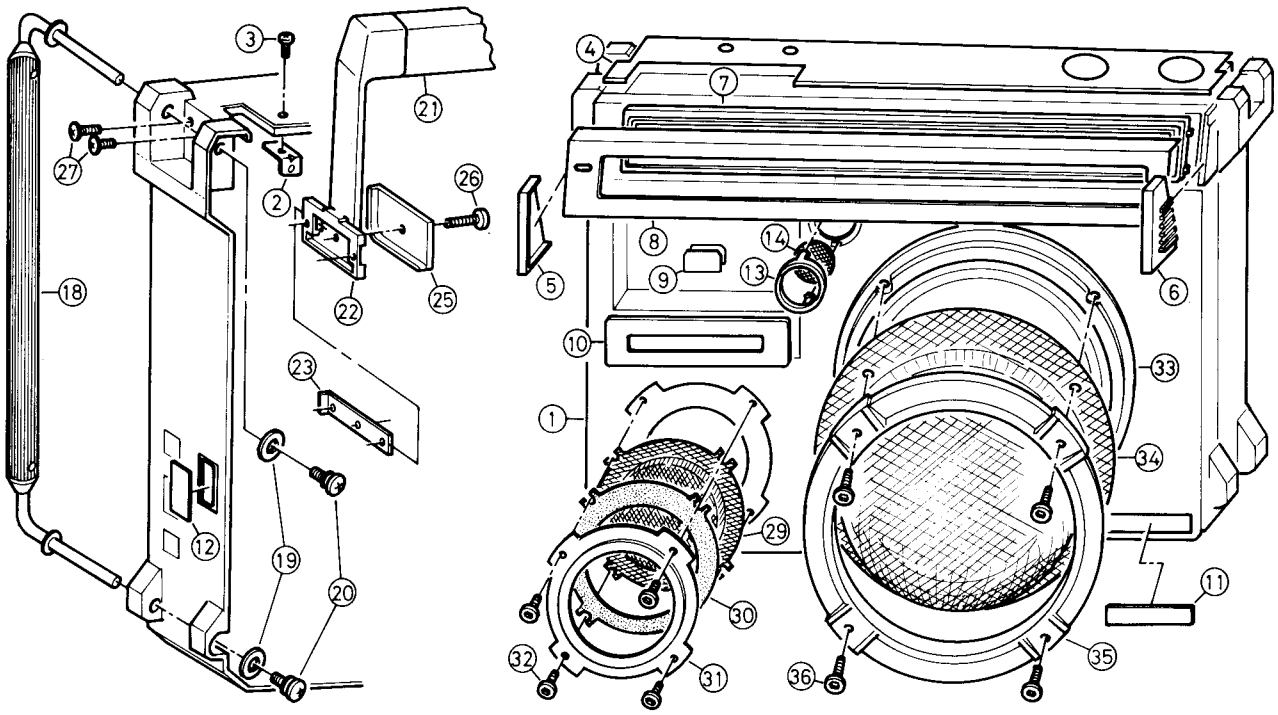


Fig. 59

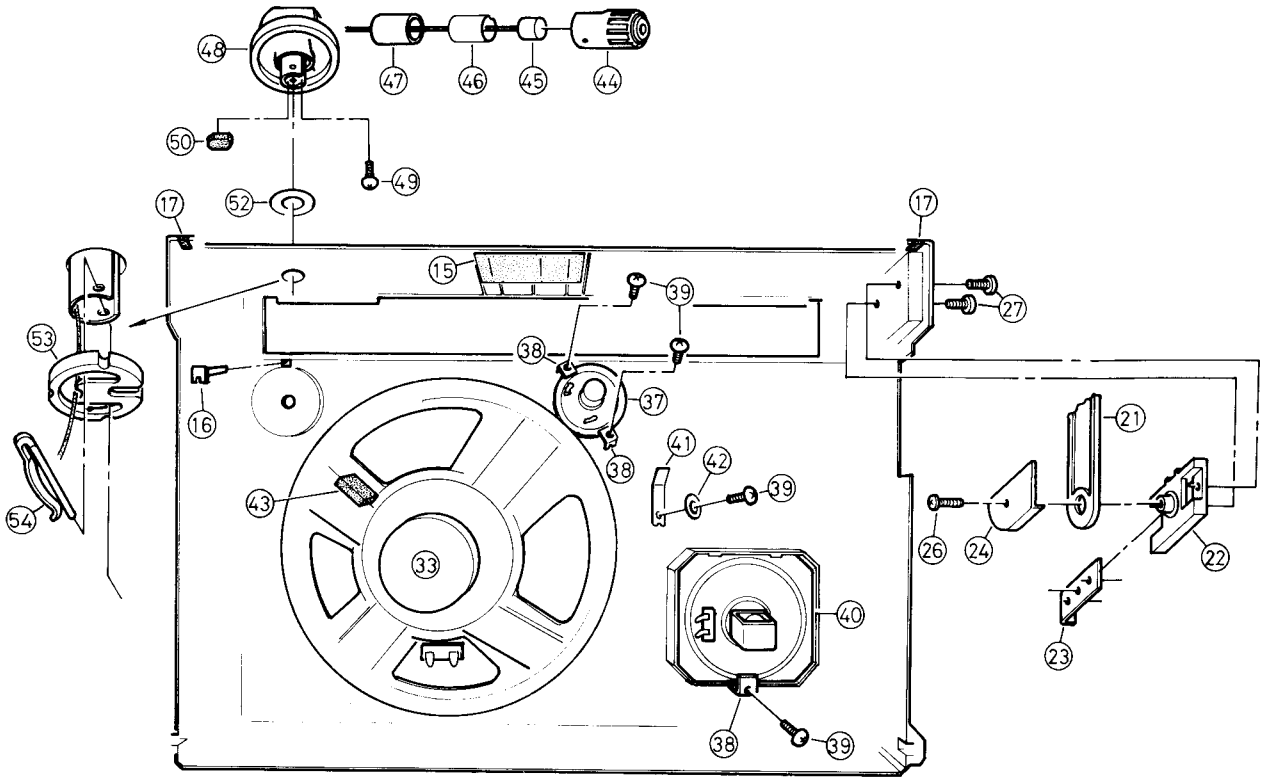


Fig. 60

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1~17	*ZCRC550L-CBF	Front Cabinet Ass'y		1
1	*VJC1042-002	Front Cabinet		1
2	*VYH4225-001	Tapping Plate		2
3	SPSP3006ZS	Screw		2
4	*VJD2122-005	Top Panel	Glued	1
5	*VJD3127-001	Side Panel (L)	"	1
6	*VJD3128-001	" (R)	"	1
7	*VJK2110-001	Dial Lens	"	1
8	*VJD2123-002	Dial Panel	"	1
9	V44957-001	Reflection Plate	"	1
10	*VJD4174-002	Counter Panel	"	1
11	QXM2251-001	Mark	"	1
12	*VJD4003-004	Plate	"	1
13	*VJD4172-00A	Speaker Grill	"	1
14	*VJD4192-001	Punching Panel	"	1
15	*VYTA417-001	Dust Pad	"	1
16	*VJD4187-001	Pointer	"	1
17	VYSA1R4-041	Spacer	"	2
18	*VJH4008-00A	Protector		2
19	WNS4000Z	Washer		4
20	LPSP4012ZS	Ass'y Screw		4
21	*VJH3005-00C	Handle		1
22	*VYH3120-001	Handle Supporter		2
23	*VYH4224-001	Bracket		2
24	V44943-001	Washer (L)		1
25	V44944-001	" (R)		1
26	SPSP3014ZS	Screw		2
27	SDSP3010RS	"		4
28			Blank No.	
29	*VJD4171-001	Punching Panel (B)		1
30	*VYTA418-001	Spacer		1
31	*VJD3125-002	Speaker Escutcheon		1
32	*VJD4008-001	Special Screw		4
33	*EAS25P77S	Speaker	Woofer (SPK-1)	1
34	*VJD2120-001	Punching Panel (A)		1
35	*VJD2121-001	Speaker Ring		1
36	*VJD4008-002	Special Screw		4
37	EAS5PH50SK	Speaker	Tweeter (SPK-3)	1
38	V45048-001	Clamp		3
39	SBSB3010Z	Screw		4
40	*EAS10PM115S	Speaker	Mid-Range (SPK-2)	1
41	*VKY4136-001	Door Spring		1
42	Q03091-109	Washer		1
43	VYSR110-004	Spacer	Glued	1
44	*VJD4175-002	Microphone Holder		1
45	*VMME62N-017	Condenser Microphone		1
46	*VYH4253-001	Microphone Shield		1
47	*VYH4226-002	Microphone Bushing		1
48	*VJD3129-001	Cover		1
49	SDSA2608Z	Screw		1
50	*VYH4274-001	Wire Clamp		1
51			Blank No.	
52	*Q03093-525	Washer		1
53	*VYH4227-001	"		1
54	*VYH4251-001	Snap Pin		1

Exploded View of Rear Cabinet (RC-550L)

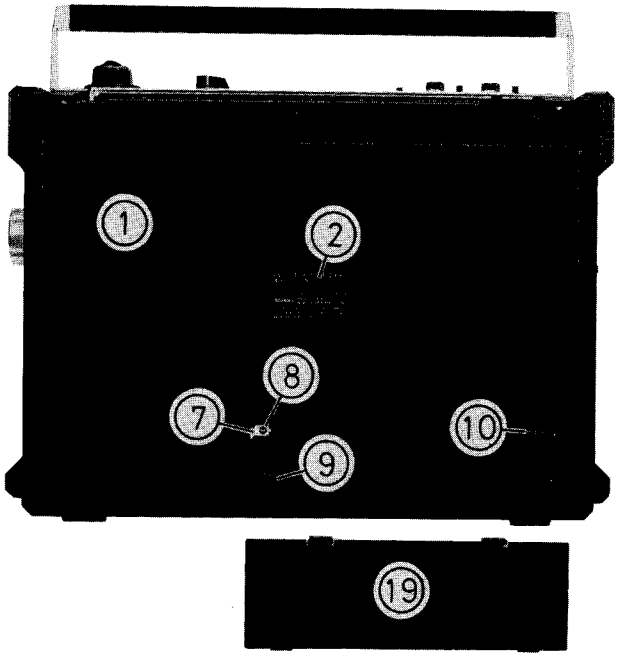


Fig. 61

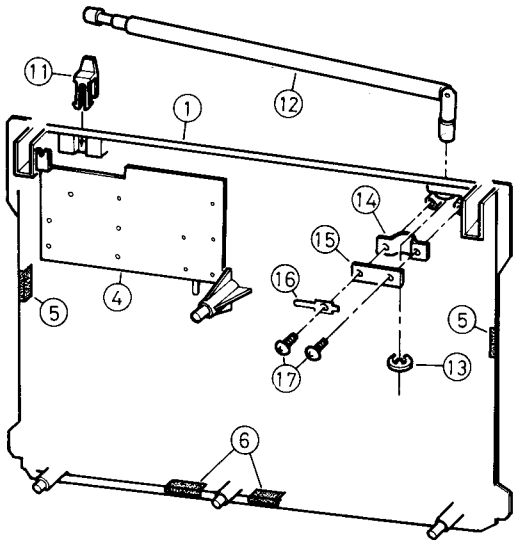


Fig. 62

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1~6	*ZCRC550L-CBR	Rear Cabinet Ass'y		1
1	*VJC1043-002	Rear Cabinet		1
2	*VYN5044-006C	Name Plate	Glued	1
3			Blank No.	
4	*VYH4229-001	Shield Plate	Heat-caulked by iron	1
5	VYSA1R4-050	Spacer	Glued	2
6	VYSA1R4-051	〃	〃	2
7	V42989-009	Battery Contact		1
8	SBSB3008Z	Screw		1
9	53738-1	Spring		1
10	VYH4011-001	〃		1
11	V44618-002	Antenna Retainer		1
12	QZR4333-001	Rod Antenna		1
13	REE6000	E-Ring		1
14	V44195-002	Rod Antenna Holder		1
15	V44196-003	〃		1
16	V41208-003	Tab		1
17	SBSB3008Z	Screw		2
18			Blank No.	
19	*ZCRC550-BCA	Battery Cover Ass'y		1

Final Packing Ass'y (RC-550L)

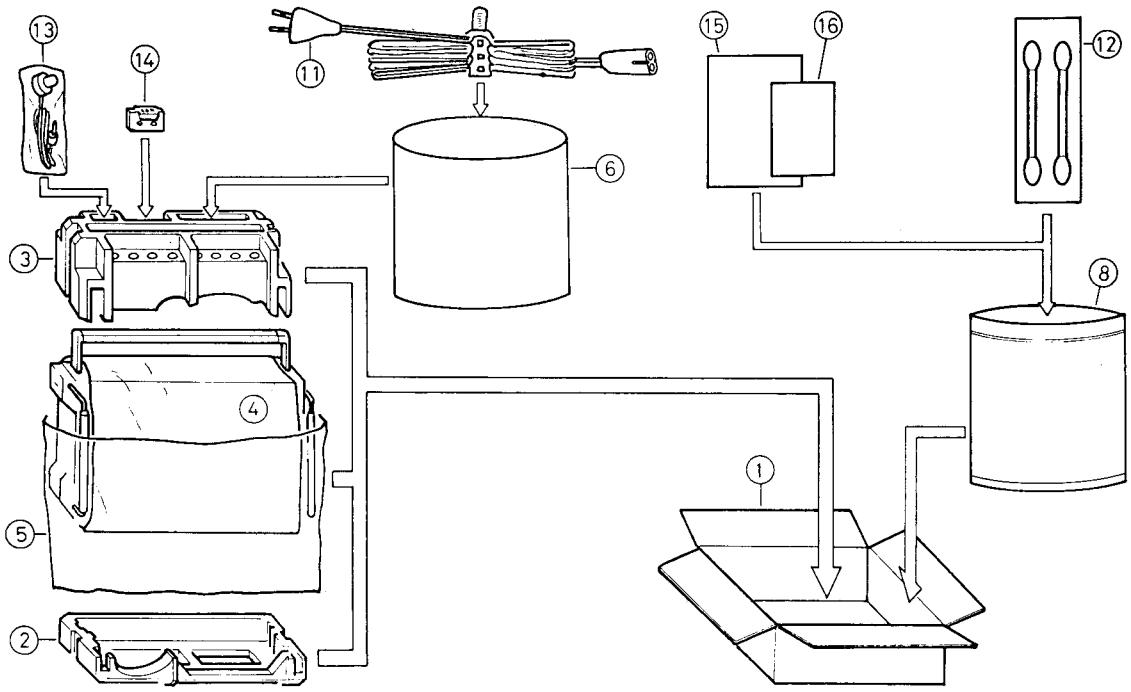


Fig. 63

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VPD5044-J07	Carton Box		1
2	*VPH1138-001	Lower Cushion		1
3	*VPH1137-001	Upper Cushion		1
4	VHPJ109-039	Wrapping Paper		1
5	QPGA070-07507	Polyethylen Bag		1
6	QPGA012-02505	"	for Power Cord	1
7	QPGB024-03404	"	for Accessories	1

Accessories (RC-550L)

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
11	QMP3950-183	Power Cord	(Safety Assurance Part)	1
12	*VYA4001-00A	Head Cleaning Stick		2
13	QME1308-004	Magnetic Earphone		1
14	VGT12S2-J03	Cassette Tape		1
15	*VNM0727-301	Instruction Book		1
16	VNC6305-001	Troubleshooting Chart		1
17	*VNF0708-001	Feature Sticker	Glued on cassette door	1

Difference of Model RC-550LB

Difference between RC-550LB and RC-550L is the power supply section.
The former model is equipped with the power switch and the latter model is not equipped with it.

Wiring Connection (RC-550LB)

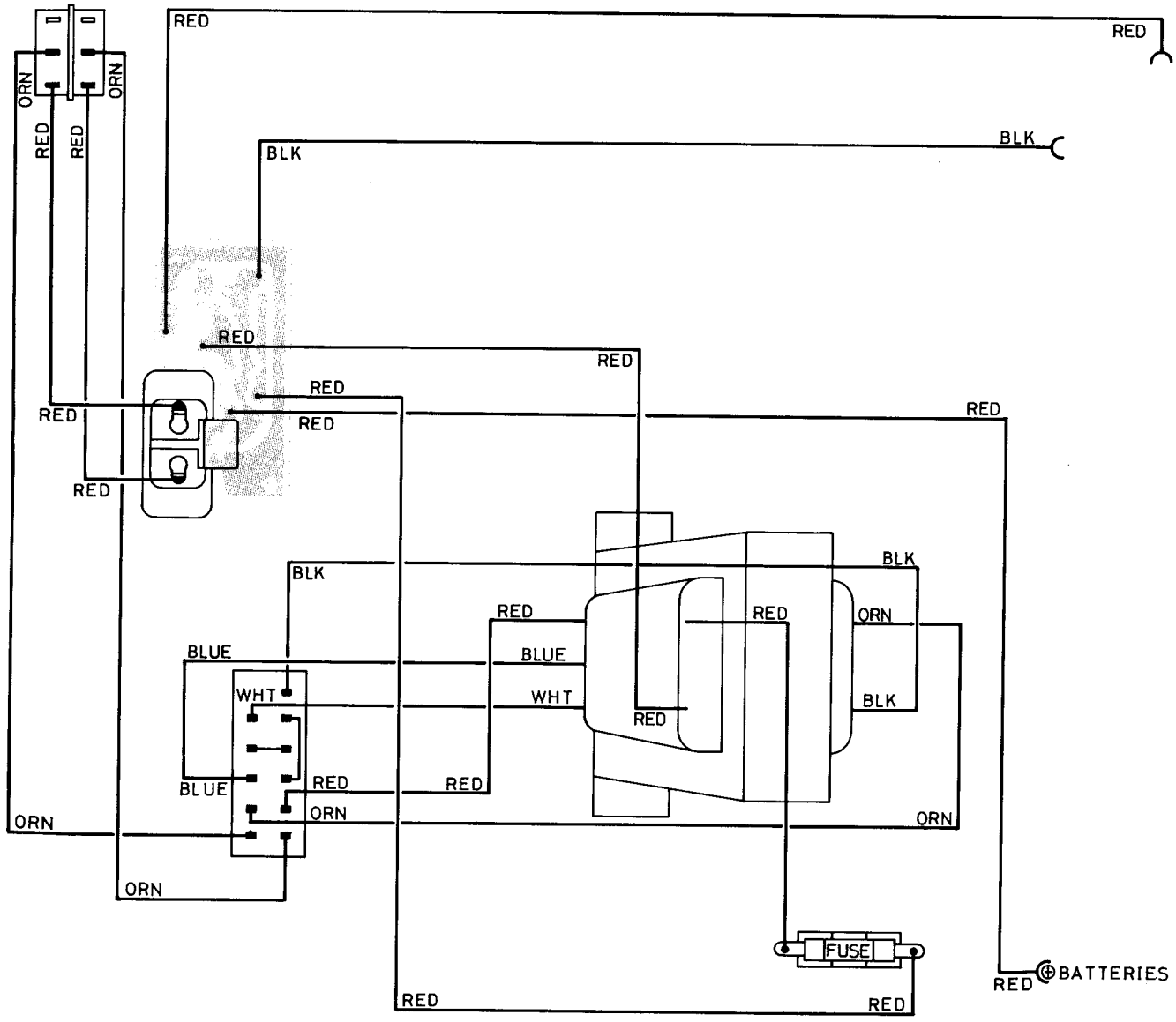


Fig. 64

Note: Refer to Fig. 40, as for the other section.

Power Supply Circuit Board Ass'y (RC-550LB)

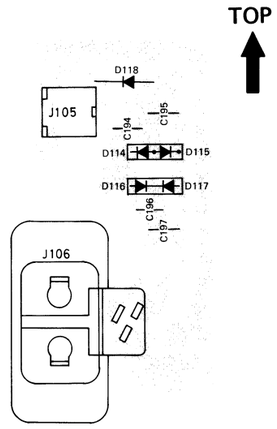


Fig. 65

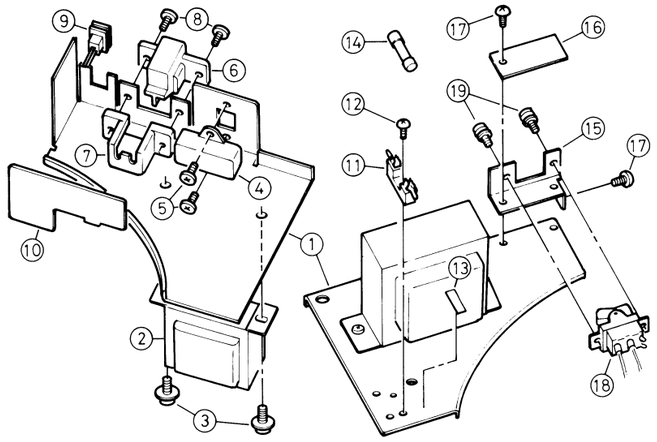


Fig. 66

Diodes

Ref. No.	Parts No.	Parts Name	Description
D114,115	DS132A	Silicon Diode (Stack)	SANYO ⚠
D116,117	DS131A	" (")	" ⚠
D118	U08B	"	HITACHI ⚠

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C194~197	QCF11EZ-103	Ceramic	0.01μF 25V

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VYH3123-002	Chassis		1
2	VTP57N2-12ABS	Power Transformer	⚠T101	1
3	DPSP4008ZS	Ass'y Screw		2
4	QSS2325-005BS	Slide Switch	⚠	1
5	SPSP3004ZS	Screw		2
6	QMC0263-001BS	AC Socket Ass'y	⚠J106	1
7	V44399-00D	Cap	⚠	1
8	SPSP2608Z	Screw		2
9	*QMA1221-005	DC Jack Ass'y	⚠J105	1
10	*————	Circuit Board Ass'y	Power Supply	1
11	QMG1321-002	Fuse Holder	⚠	1
12	SBSB2608Z	Screw		1
13	VND4003-009	Fuse Label	Glued	1
14	QMF51A2-2R0BS	Fuse	⚠2AT	1
15	*VYH4321-001	Switch Bracket		1
16	*VYTS403-001	Spacer	Glued	1
17	SBSB3008Z	Screw		2
18	QSE2235-205BS	Seesaw Switch	⚠	1
19	LPSP3006ZS	Screw		2

Note: 1. The circuit board assembly will not be available as spare part.
2. The parts marked ⚠ are the important parts for safety assurance.
Use the specified part, when replacing the safety assurance part, never use an equivalent one.

Exploded View of Rear Cabinet (RC-550LB)

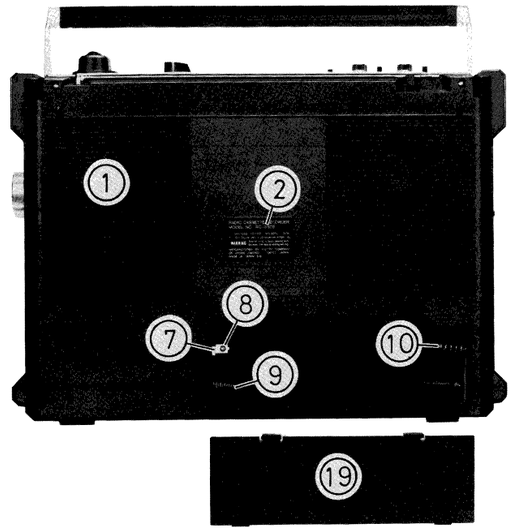


Fig. 67

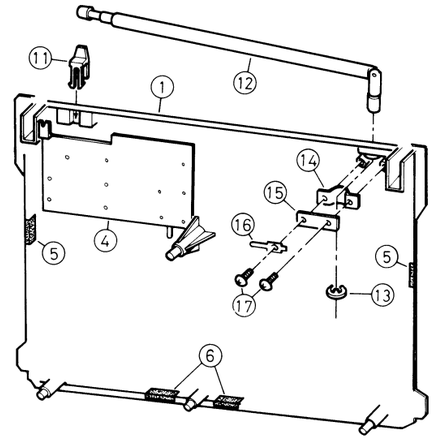


Fig. 68

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1~6	*ZCRC550LB-CBR	Rear Cabinet Ass'y		1
1	*VJC1043-002	Rear Cabinet		1
2	*VYN5044-005C	Name Plate	Glued	1
3			Blank No.	
4	*VYH4229-001	Shield Plate	Heat-caulked by iron	1
5	VYSA1R4-050	Spacer	Glued	1
6	VYSA1R4-051	"	"	1
7	V42989-009	Battery Contact		1
8	SBSB3008Z	Screw		1
9	53738-1	Spring		1
10	VYH4011-001	"		1
11	V44618-002	Antenna Retainer		1
12	QZR4333-001	Rod Antenna		1
13	REE6000	E-Ring		1
14	V44195-002	Rod Antenna Holder		1
15	V44196-003	"		1
16	V41208-003	Tab		1
17	SBSB3008Z	Screw		2
18			Blank No.	
19	*ZCRC550-BCA	Battery Cover Ass'y		1

Exploded View of Front Cabinet (RC-550LB)

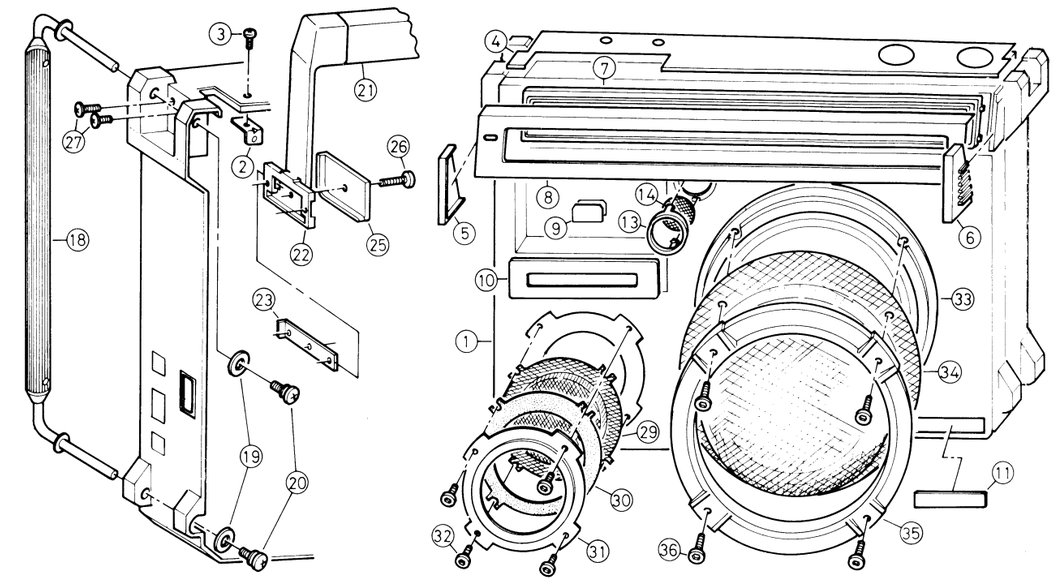


Fig. 69

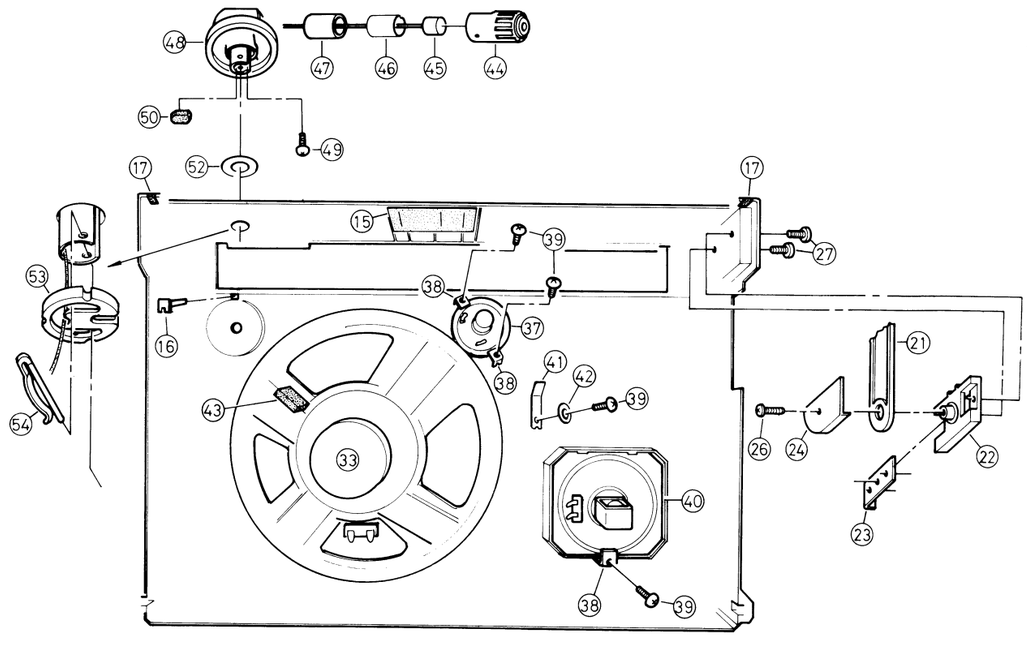


Fig. 70

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1~17	*ZCRC550LB-CL	Front Cabinet Ass'y		1
1	*VJC1042-002	Front Cabinet		1
2	*VYH4225-001	Tapping Plate		2
3	SPSP3006ZS	Screw		2
4	*VJD2122-005	Top Panel	Glued	1
5	*VJD3127-001	Side Panel (L)	"	1
6	*VJD3128-001	" (R)	"	1
7	*VJK2110-001	Dial Lens	"	1
8	*VJD2123-002	Dial Panel	"	1
9	V44957-001	Reflection Plate	"	1
10	*VJD4174-002	Counter Panel	"	1
11	QXM2251-001	Mark	"	1
12			Blank No.	
13	*VJD4172-00A	Speaker Grill	Glued	1
14	*VJD4192-001	Punching Panel	"	1
15	*VYTA417-001	Dust Pad	"	1
16	*VJD4187-001	Pointer	"	1
17	VYSA1R4-041	Spacer	"	2
18	*VJH4008-00A	Protector		2
19	WNS4000Z	Washer		4
20	LPSP4012ZS	Ass'y Screw		4
21	*VJH3005-00C	Handle		1
22	*VYH3120-001	Handle Supporter		2
23	*VYH4224-001	Bracket		2
24	V44943-001	Washer (L)		1
25	V44944-001	" (R)		1
26	SPSP3014ZS	Screw		2
27	SDSP3010RS	"		4
28			Blank No.	
29	*VJD4171-001	Punching Panel (B)		1
30	*VYTA418-001	Spacer		1
31	*VJD3125-002	Speaker Escutcheon		1
32	*VJD4008-001	Special Screw		4
33	*EAS25P77S	Speaker	Woofer (SPK-1)	1
34	*VJD2120-001	Punching Panel (A)		1
35	*VJD2121-001	Speaker Ring		1
36	*VJD4008-002	Special Screw		4
37	EAS5PH50SK	Speaker	Tweeter (SPK-3)	1
38	V45048-001	Clamp		3
39	SBSB3010Z	Screw		4
40	*EAS10PM115S	Speaker	Mid-Range (SPK-2)	1
41	*VKY4136-001	Door Spring		1
42	Q03091-109	Washer		1
43	VYSR110-004	Spacer	Glued	1
44	*VJD4175-002	Microphone Holder		1
45	*VMME62N-017	Condenser Microphone		1
46	*VYH4253-001	Microphone Shield		1
47	*VYH4226-002	Microphone Bushing		1
48	*VJD3129-001	Cover		1
49	SDSA2608Z	Screw		1
50	*VYH4274-001	Wire Clamp		1
51			Blank No.	
52	*Q03093-525	Washer		1
53	*VYH4227-001	"		1
54	*VYH4251-001	Snap Pin		1

Final Packing Ass'y (RC-550LB)

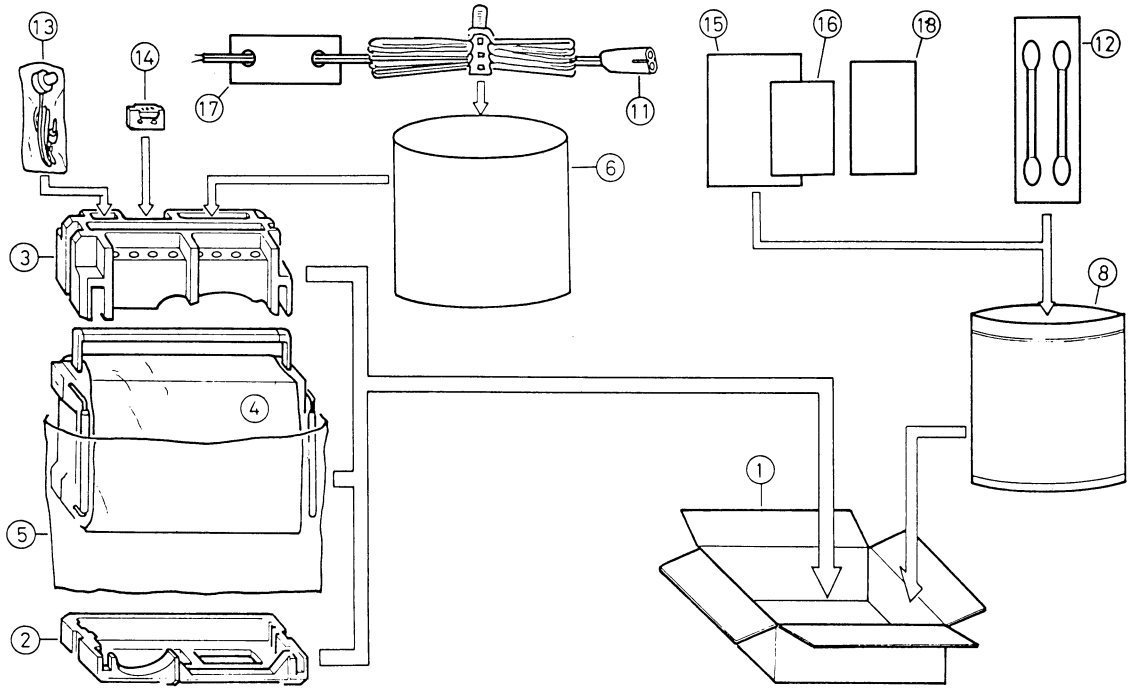


Fig. 71

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*VPD5044-J06	Carton Box		1
2	*VPH1138-001	Lower Cushion		1
3	*VPH1137-001	Upper Cushion		1
4	VHPJ109-039	Wrapping Paper		1
5	QPGA070-07507	Polyethylen Bag		1
6	QPGA012-02505	"	for Power Cord	1
7	QPGB024-03404	Polyethylen Bag	for Accessories	1

Accessories (RC-550LB)

Asterisked parts (*) show new parts.

Ref. No.	Parts No.	Parts Name	Description	Q'ty
11	QMP9017-009BS	Power Cord	⚠ (Safety Assurance Part)	1
12	*VYA4001-00A	Head Cleaning Stick		2
13	QME1308-004	Magnetic Earphone		1
14	VGT12S2-J03	Cassette Tape		1
15	*VNM0727-301	Instruction Book		1
16	VNC6305-001	Troubleshooting Chart		1
17	QZL1002-003BS	Warning Label	⚠	1
18	BT20013B	Guarantee Certificate		1
19	*VNF0708-001	Feature Sticker	Glued on cassette door	1